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REPORT

OF THE

Mass:

BOARD OF METROPOLITAN PARK COMMISSIONERS.

JANUARY, 1903.



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OFFICERS.

Commissioners.

WILLIAM B. DE LAS CASAS, *Chairman*.

EDWIN B. HASKELL.

EDWIN U. CURTIS.

DAVID N. SKILLINGS.

ELLERTON P. WHITNEY.

Landscape Architects.

Advisory.

OLMSTED BROTHERS.

Engineer.

WILLIAM T. PIERCE.

Law and Claims.

GEORGE LYMAN ROGERS.

Secretary.

JOHN WOODBURY.

OFFICES, 14 Beacon Street, Boston, Mass.

Commonwealth of Massachusetts.

R E P O R T .

The Metropolitan Park Commission presents herewith its tenth annual report.

The areas and boundaries of the reservations and parkways remain substantially the same as at the time of the last report. Takings for Furnace Brook Parkway which were then in process have since been completed, and slight changes by takings or abandonments in the various reservations and parkways have been made to facilitate settlement of claims for lands previously taken. Construction and development have been in completion of work undertaken in the previous year. Revere Beach Parkway has been opened to the public as far as Main Street, Everett, except for the bridge over the Eastern Division of the Boston & Maine Railroad at Revere, which is still in process of construction. The drive along Charles River from the town landing to the Arsenal in Watertown has been completed and opened to use. Mattapan Bridge is so far completed that it is open to public use: a new bridge, to be known as Wellington Bridge, is in process of construction as part of Fellsway across Mystic River; a superintendent's house has been built at Revere Beach; a new bath-house, power house, laundry and additional pavilions have been built at Nantasket, and changes have been made in the hotel and café buildings. In both reservations and parkways rather more than the usual amount of work has been done incident to care and maintenance, and to improving the detail and method of managing and providing for an increasing public use.

Except for the customary annual appropriations for care and maintenance, the only new appropriation has been one of \$450,000, which was made as an addition to the Boulevard or Metropolitan Parks Loan, Series II., to provide for unsettled claims for takings of land which were authorized in previous years. Claims against all the loans for lands taken have been settled during the year just ended to the number of 178 and the amount of \$450,000, — an aggregate in both number and amount greater than the entire estimated balance of all the claims now outstanding. The outstanding claims are, however, all in suit, and many of them are on account of takings made a long time since. Judging by the result of the suits which have been tried during the past year, the Commission thinks that, with the heavy amount of interest which is to be added under the very liberal policy of the Commonwealth, these claims will exceed the balances remaining in the various loans.

During the past year, the Supreme Court has adjudged, sustained and approved the findings of the special Commission appointed by it under chapter 419 of the Acts of 1899 to apportion among the cities and towns of the Metropolitan Parks District the proportion in which each should make annual payments during the period of five years beginning with 1900 for the care and maintenance of the system, the interest charges upon the loans, and the sinking funds for the extinguishment of the loans. As a result, the cities and towns of the District have made payments this year to the Commonwealth covering assessments for three years.

Full details as to the areas of all the reservations and parkways, the expense of completing construction, the amount and present condition of the loans, and as to the work done during the year, will be found in the accompanying reports of the Secretary and Engineer; and a statement of the reasons which governed the apportionment commission in its findings, and the amount of the assessments made by the Treasurer and Receiver-General of the Commonwealth upon the several cities and towns in accordance with the apportionment, will be found in the Appendix.

A full decade has now passed since the Legislature of



MIDDLESEX FELLS RESERVATION. THE SHEEP PASTURE.

1892 appointed a commission to "consider the advisability of laying out ample open spaces for the use of the public in the cities and towns in the vicinity of Boston," and since the commission thus appointed made report to the Legislature of 1893 of the general plan for the Metropolitan Parks System. So large a part of the plan then reported has now been carried out that this Board may very properly at this time express its deep appreciation of the public confidence and liberality which has been extended to it in its work, and make the present report chiefly a brief summary of what has been already accomplished and of what remains to be accomplished. The general plan submitted with the report of the Preliminary Commission of 1893, and contained in the accompanying report of Charles Eliot, Landscape Architect, was substantially the same as that which accompanies and illustrates the present report. Comparison of the two will show that almost the only difference is that on the original plan the areas for the proposed system were referred to under the single name of parks, and were all indicated by a single color as lands proposed to be acquired; while on the map of to-day some of these areas are referred to as parks or reservations and some as parkways or boulevards, and only a comparatively small area is in the color which indicates lands yet to be acquired. An examination of the early report will show that the smaller areas referred to as parks were connecting areas to be acquired for the purpose of furnishing parkway or boulevard communication between the reservations and either the principal park areas already acquired by the various cities and towns of the District or the chief centres of population of the District. This distinction was recognized within one year of the beginning of the work by the passage of an act known as the Boulevard Act.

It will be clearly understood, then, that the acquirement and development of the Metropolitan Parks System was begun and has proceeded to its present completeness according to a well-defined plan; and that the Legislature has recognized this from year to year by making substantially all appropriations for the work being carried on by this

Commission as additions either to the Parks Loans, authorized under the general Park Act, chapter 407 of the Acts of 1893, and the Nantasket Beach Act, chapter 464 of the Acts of 1899, or to the Boulevard Loan, authorized under chapter 288 of the Acts of 1894.

When the Commission entered upon its work in 1893, it was upon the understanding that the acquirement of the necessary lands for the system was of higher importance than that of their immediate development. It has not been possible to adhere strictly to this original plan, however, because with the acquirement of the woods reservations the necessity for their protection against fire immediately arose; and with the ownership of the beaches and control of the rivers there came the necessity of providing adequately for a public use which had before been inadequately provided for by private enterprise; and because, as soon as land for parkways and boulevards was acquired, a public desire for construction of some portions, at least, showed itself so vigorously as to lead the Legislature to make appropriations for construction of those portions for which the demand was made. Sometimes, no doubt, this expression of public desire and its gratification have seemed sporadic or illogical; but to those who have closely followed the hearings and the legislation in connection with the work from year to year, it is quite apparent that there has always been a clear conception of the general plan, and that it has satisfied both the highest test of professional scrutiny and also the common-sense of the general public. Whatever, therefore, has been done in variance of the original intention that all lands should be acquired in advance of construction and development, and whatever tendencies there have been to proceed at a rate faster than the financial condition of the District would warrant, have been due to a general public appreciation of the plan, and an understanding of the conveniences to result, the real necessities to be provided for, and the real barriers to proper growth to be removed by its execution, rather than to a mere desire for parks and parkways and their accessories as a luxury or adornment of modern life. The Commission regrets that all the lands for the entire system

were not provided in advance of construction, and that plans for construction have not always been worked out in all their details in advance of appropriations ; but it takes the greatest satisfaction in the fact that all the lands which have been acquired and all the construction which has been entered upon are proper parts of the entire system, and represent progress towards its completion as originally contemplated. The skill in planning the system, the rapidity with which present results have been accomplished, the intelligent appreciation manifested by the citizens of the District and of the Commonwealth generally, and the patient care with which the Legislature of each year has considered every matter relating to it, has excited a world-wide interest in the Metropolitan Parks. Even in their present condition, they have added not only a valuable asset of lands, but also an attractiveness and reputation to Boston and to the Commonwealth which is in itself a dividend of most practical form. It is, then, of the highest importance that at this time, when probably two-thirds of the cost of the completed system has been advanced by the Commonwealth and its repayment assumed as a tax burden by the District, the gradual completion of the entire system at a rate within the financial ability of the District be kept clearly in mind, and that merely local desires be not allowed to graft upon it merely local problems or local benefits which are not a fair part of the general plan.

As the case now stands, the greater woods reservations have been acquired, and they require only slight changes to supply omissions in the original takings. For example, land about Ponkapoag Pond is needed to supplement the generous gift of Mr. Henry L. Pierce ; and it is desirable to place in more certain form of control the lands in Middlesex Fells, which, although included in the holdings of the local water boards at the time the reservation was formed, have not been acquired by the Metropolitan Water Board. Along the banks of the Charles, Neponset and Mystic rivers the acquirements are sufficient, except at a few points where temporary necessities caused the omission of really desired takings, and except that portions of the banks of Charles

River between Newton Upper Falls and Dedham, although thought to have been provided for, could not be acquired under the appropriations which were made with reference to takings on that river. The acquirements of those portions of the seashore of the District which are desirable for public use and not required for commercial or business uses is as complete as the Commission can recommend, except at Lynn, Winthrop and Nantasket. Acquirement of the desired shore at Winthrop has been rendered difficult and perhaps impossible by the erection of buildings which obstruct the line of improvement of takings previously suggested. A similar result may follow at Lynn and Nantasket, unless immediate action is taken.

The parkways may be divided into those north of the Charles River and those south of the Charles River. For the latter, the lands have all been acquired except for that portion of the westerly parkway which lies between Paul's Bridge and the Blue Hills, and for the spur or entrance parkway from Dedham to the Stony Brook Woods. For the system north of Charles River, there remain to be acquired only the lands for the portion of the westerly parkway which lies between Fresh Pond Parkway and Mystic River, and for the parkway between the Fells and Lynn Woods, and between Lynn Woods and the Revere Beach Reservation, and for the spurs or entrance parkways from Wakefield and from Woburn to the Fells. It also remains to be decided whether a connection shall be made between the north and south portions of the system by a parkway from Charles River across Cambridge to Broadway Park in Somerville, where Fellsway begins. Such a connection has been recommended in a special report made by direction of the Legislature, but it ought to be considered as a special matter, because the dense population through which it must pass will render its acquirement very expensive, and because, as the Commission thinks, the even greater necessity of providing for other classes of travel through the same territory may be dealt with most economically and conveniently at the same time.

Of the 23 miles of parkway for which the land has already been acquired, about 13 miles have been fully constructed and

are in public use. It is very desirable to have the lands acquired for the remaining 10 miles of parkway necessary to complete the system, and to begin the process of gradually completing the construction of the parkways remaining to be constructed; but the same reasons which cause hesitancy in suggesting at this time further immediate appropriations for acquirement of lands, also make it inadvisable to suggest further immediate appropriations for construction. The Commission, therefore, contents itself with expressing the opinion that whenever such appropriations are made, they be: first, for the acquirement of lands for completion of the system, as previously suggested; and, next, for the construction and completion of Revere Beach Parkway between Main Street, Everett and Fellsway, and of the connecting parkway between the north-westerly edge of Revere Beach and the proposed State highway for which lands have been acquired in Lynn, and for hastening in some way the rebuilding of the Boylston-North Harvard Street Bridge across Charles River between Cambridge and Boston, at the easterly point of approach to the Speedway.

These matters all represent the completion of larger usefulness of work, upon which great sums have already been expended.

During the ten years now past the work of acquirement and development has been so rapid and absorbing that public attention has been little drawn to the details of organization and superintendence or of care and maintenance. These matters have, however, been of great concern to the Commission itself. The relation of the Commission, as representing the Commonwealth, to the District, to its several cities and towns, to the counties wholly or partly included within it and to the citizens who have rights, duties and relations towards all, has often presented problems quite unlike those coming to any other public body or represented by any other park management in this or other countries. The relation has been maintained and the incidental problems have been dealt with in a way that has developed a definiteness of business system, superintendence and control which is reasonably economical and efficient. This has been done

with so little friction that the public who use the reservations and parkways have come to an understanding of the rules and regulations governing them, and to a very general desire to conform to them. The result is a present organization which can without material increase of expense easily adjust itself to all probable problems of care and control, both of the reservations and parkways already acquired and of those which remain to be acquired or brought into public use.

The Commission and its chief advisers remain unchanged from last year. The clerical force is practically the same, but a slight reduction has been made in the engineering force. The superintendents of the various reservations and parkways remain unchanged, but the duties of some of them have been enlarged by placing new lands or parkways or other constructed work under their charge. The police and laboring forces have been increased only as required to provide for these additional lands and parkways, for the new bath-house at Nantasket, and for the special work of destroying insect pests in the woods reservations.

The work of care and maintenance naturally divides itself as it relates to the woods reservations, the rivers, the seashore and the parkways or boulevards. In the woods reservations, which now aggregate 7,309 acres, the work of care and maintenance has come to be chiefly that of protection against injury by fire and insect pests, that of care of the roads and paths and that of making provision for the convenience and safety of the public. No serious fire has occurred since the reservations were acquired. The roads are mostly of a temporary sort, but are of sufficient excellence and extent to answer most needs for many years to come; and it is the desire of the Commission not to materially increase or change these roads, except as necessity requires, and then only according to definite plans of permanent development. Such plans are being slowly matured, and are already being followed in their general requirements as to tree cutting. Continuous work, however slight, according to such permanent policy, will in an economical way improve the tree growth and attractiveness of the reserva-

tions without changing the general character, and at the same time prepare gradually for ultimate and permanent development. Some means of affording pleasure have been found in placing water fowl upon the ponds and sheep on an open field in the Fells, and it is also hoped that during the coming season further provision than now exists may be made for the accommodation of both large and small picnic parties. The most serious present problem of these reservations, especially in the Fells, is that of the gypsy and brown-tail moths. They have been kept under fair control at comparatively small cost, and this result can probably be continued if the surrounding cities and towns will control them in the lands immediately adjoining the reservations. This has been done only to a slight extent, even in the cities of Melrose, Malden and Medford, where the foliage of large numbers of trees was completely stripped last summer. Unless determined work is done in the infested regions before April 1, the same trees will be stripped again and killed, and an enormous number of the pests will spread to other trees both without and within the reservation. It is sincerely to be hoped that some public provision or requirement may be made to induce these cities and towns to take care of the moths in their own territory.

The banks of Charles, Neponset and Mystic rivers for about 30 miles are now in the care of this Board. Little work has been done upon them, other than to clear away rubbish and to maintain a police patrol. On the upper Charles River, however, a river police in boats has been maintained on the section between Waltham and Riverside, and has rescued 97 persons in the last three years. A new headquarters building is needed at this point. When the new road in Watertown is completed to Gerry's Landing, it will give, in connection with the Cambridge park drives along the river, a drive of some 10 miles from the very heart of Boston. Rebuilding the bridges, especially the Boylston-Harvard Street Bridge, will give a greatly improved approach to the Speedway and driveway on the south side of the river, which is now in a very satisfactory condition and is beginning to show a greatly increased use.

The beaches and seashore are in summer the most used portions of the system, and now aggregate about 8 miles. At Swampscott, Lynn and Nahant no improvements have been made except by clearing away unsightly buildings and rubbish, maintaining a police patrol, and providing a temporary sanitary building at Nahant Beach. A sea-wall is needed along a portion of the Lynn shore, and a bath-house is also very much desired at Nahant Beach. Revere Beach is now, and apparently always will be, the most used of the beaches. It is within a five-cent fare of a large part of the District, and on warm days is frequently used by over one hundred thousand people. The number and character of the near-by amusements provided by private enterprise tend to bring larger numbers to the reservation and to increase the difficulty of handling the crowds. Each year presents new problems and makes more apparent the necessity of completing the development of the reservation, especially by controlling the entrance roads and by providing additional shelters and extending the driveway north from Revere Street to a connection by road and bridge with the city of Lynn. Last season was an unusually cool one, and the use of the bath-house was less than that of the previous hot seasons, although on Labor Day the bathers were more in number than on any single day in any previous year. For the past two years there has been a movement before the Legislature to require the Commission to reduce the rates charged at this bath-house, which, if finally allowed to succeed, will change the bath-house from the purpose for which it was built, and bring unnecessary expense upon the District. This bath-house was planned and built to take the place of private bath-houses, and to provide in a better and more sanitary way what they had formerly provided. It was not designed as a free bath-house, and cannot be operated as such except at a cost entirely out of relation to the numbers for whom it can provide. To make it a free, or even a practically free, bath-house would largely defeat its usefulness in a hot season; and the Commission, therefore, suggests that, rather than to bring such a result, it would be better, before deciding that the District ought to provide



MYSTIC VALLEY PARKWAY.—MANCHESTER FIELD.

free bath-houses, to require a study and report on the entire problem and plans for additional bath-houses, which would provide similar accommodations to those provided so admirably for this purpose by such free city bath-houses as the one at L Street in the city of Boston. The bath-house at Revere Beach was designed to be self-supporting, and it has been so. In hot seasons, like those of 1900 and 1901, there was a surplus of receipts over expenses, but only sufficient to provide for replenishments and repairs and for the operating expenses of the following season until about July 1, when receipts generally begin to equal expenses. Upon an informal request of the legislative committee having before it a bill to require a reduction of rates, the Commission gave the matter a trial last summer by reducing the rates for adult bathers. This was continued until July 26, when, in spite of efforts to economize by reducing the number of attendants below that required for hot days and by placing others on half time, a deficiency resulted. The former rates were then restored, with the result that at the end of the season the deficiency was small, but still sufficiently large to have caused great annoyance if there had not been a surplus brought over from the previous year, and sufficiently large to make it necessary to postpone much-needed replenishments and repairs to a more prosperous season.

Winthrop Shore has been placed permanently in the care of the Commission. It is largely used and is in excellent repair, but heavy storms wash great amounts of debris upon the roadway, and tend to undermine the wall. The present gravel sidewalk on the ocean side must be replaced by a water-tight sidewalk to protect this wall.

At Nantasket improvements have been made on the line of the plans adopted for a gradual completion of the reservation. The bath-house was a great addition to the usefulness of the reservation, and, although not self-supporting yet, will probably become so if the present prices continue. It is desirable that immediate provision be made for additional sanitary accommodations and for reconstruction of the sidewalks and roadway, and for a safe approach to the railroad depot and steamboat pier. The desire of the railroad com-

pany to use its vacant land adjoining County Road for other than railroad purposes leads the Commission to recommend that it be authorized to acquire so much of this and other lands near by as will answer for carrying out the plan of the development of the reservation, and for protecting the reservation and the increasing numbers who use it.

All of which is respectfully submitted,

WILLIAM B. DE LAS CASAS.

EDWIN B. HASKELL.

EDWIN U. CURTIS.

DAVID N. SKILLINGS.

ELLERTON P. WHITNEY.

DEC. 10, 1902.

REPORT OF THE SECRETARY.

Hon. WILLIAM B. DE LAS CASAS,

Chairman, Metropolitan Park Commission.

SIR: — I herewith present my report for the year ending Dec. 1, 1902. It is subdivided as follows: 1. Acquisition of lands. 2. Administration. 3. Miscellaneous. 4. Finances.

1. ACQUISITION OF LANDS.

The only taking of importance has been of land in Quincy between Hancock Street and the mouth of Black's Creek, thus completing the takings for Furnace Brook Parkway, which connects Blue Hills with Quincy Shore Reservation. Minor takings, abandonments and sales, slightly changing the boundaries of the reservations and parkways, are as follows: In the Charles River Reservation an exchange of land was made with the owners of the Riverside Recreation Grounds for the purpose of improving the boundary line. A restriction on a small parcel of land of the American Waltham Watch Company was modified, in consideration of the agreement of the company to hold their entire river frontage subject to restrictions, ensuring the proper development of the river bank. On the Neponset River a strip of land near Central Avenue in Milton was abandoned to the Tileston & Hollingsworth Company, as it appeared to be essential in connection with the company's mill on the opposite side of the river. At Revere Beach the old station lot of the Boston, Revere Beach & Lynn Railroad has been sold, and a lot acquired at Charles Eliot Circle as a site for the Superintendent's house. Along Winthrop Shore several strips of land between taking and construction lines have been sold to abutters. The Commission received a gift of 3,371 feet of land included in Nantasket Beach Reservation from Jacob P.

Bates and Henry D. Yerxa. In the construction of Wellington Bridge across the Mystic River additional land in Somerville and Medford has been taken to provide proper approaches to the bridge. A piece of Revere Beach Parkway in Everett has been sold to that city, for use in connection with the separation of the grades at Everett Station on the Eastern Division of the Boston & Maine Railroad. Several parcels of land in Everett, being the balance of lots cut through by this parkway have also been sold. An abandonment was made to the Boston & Maine Railroad of a small strip where this parkway crosses the Saugus Branch of this railroad; and the lines were also changed slightly at the junction of this parkway with the Middlesex Fells Parkway at Wellington, in connection with studies for the approaches to Wellington Bridge. The inserted table gives the present areas of the reservations and length of the parkways, and shows the proportion of each in the towns and cities of the Metropolitan Parks District.

2. ADMINISTRATION.

The general offices of the Commission and the office of the Engineering Department are at 14 Beacon Street, Boston. It has been found necessary to add one clerk to the office force, owing to the increased amount of detail following upon the larger use of the reservations. The Commission employs, in the general office, in addition to the Secretary, three clerks, one stenographer, a purchasing clerk, a telephone clerk and a messenger. Two stenographers are also employed in the law and claims department.

The care of the thirteen reservations and ten parkways is divided among seven superintendents, who report directly to the Secretary as the executive officer of the Commission. Each superintendent also has charge of the policing of the reservations and parkways under his care. The police force consists at present of 4 sergeants, 35 regular and 30 reserve officers. The regular officers have permanent employment, and the reserves are used principally during the summer months. The police are chosen from the list furnished by the Civil Service Commission, and regular appointments are

Metropolitan Park System.—Dec. 1, 1902.

| | | RESERVATIONS (ACRES). | | | | | | | | | | | | | | PARKWAYS (MILES). | | | | | | | | | | | |
|---------|---------------------|-----------------------|------------------|--------------|---------------|--------------|----------------|----------------|---------------|-----------------|------------------------------|---------------|-----------------|---------------|------------------|-------------------|-------------|------------------|---------------|----------------|---------------|-----------------|-------------|----------------|---------------|----------|--------------|
| | | Blue Hills. | Middlesex Fells. | Stony Brook. | Beaver Brook. | Hart's Hill. | Hemlock Gorge. | Charles River. | Mystic River. | Neponset River. | King's Beach and Lynn Shore. | Revere Beach. | Winthrop Shore. | Quincy Shore. | Nantasket Beach. | Total Acres. | Blue Hills. | Middlesex Fells. | Revere Beach. | Mystic Valley. | West Roxbury. | Neponset River. | Fresh Pond. | Furnace Brook. | Nahant Beach. | Lynnway. | Total Miles. |
| Cities. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Boston, | - | - | 195.16 | - | - | - | 143.43 | - | 81.36 | - | - | - | - | - | 419.95 | .030 | - | - | - | 1.510 | - | - | - | - | - | 1.540 |
| 2 | Cambridge, . . . | - | - | - | - | - | - | 38.07 | - | - | - | - | - | - | - | 38.07 | - | - | - | - | - | .520 | - | - | - | - | .520 |
| 3 | Chelsea, | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .814 | - | - | - | - | - | - | - | .814 |
| 4 | Everett, | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1.653 | - | - | - | - | - | - | - | 1.653 |
| 5 | Lynn, | - | - | - | - | - | - | - | - | 7.51 | - | - | - | - | - | 7.51 | - | - | - | - | - | - | - | - | .120 | - | .120 |
| 6 | Malden, | - | 59.57 | - | - | - | - | - | - | - | - | - | - | - | - | 59.57 | - | 1.515 | - | - | - | - | - | - | - | - | 1.515 |
| 7 | Medford, | - | 669.08 | - | - | - | - | - | 265.43 | - | - | - | - | - | - | 934.51 | - | 2.350 | .482 | 1.120 | - | - | - | - | - | - | 3.952 |
| 8 | Melrose, | - | 177.54 | - | - | - | - | - | - | - | - | - | - | - | - | 177.54 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | Newton, | - | - | - | - | - | 4.27 | 124.09 | - | - | - | - | - | - | - | 128.36 | - | - | - | - | - | - | - | - | - | - | - |
| 10 | Quincy, | 2,562.57 | - | - | - | - | - | - | - | - | - | - | 37.97 | - | - | 2,600.54 | - | - | - | - | - | - | 3.326 | - | - | - | 3.326 |
| 11 | Somerville, . . . | - | - | - | - | - | - | - | 8.83 | - | - | - | - | - | - | 8.83 | - | .740 | - | - | - | - | - | - | - | - | .740 |
| 12 | Waltham, | - | - | - | 42.77 | - | - | 38.20 | - | - | - | - | - | - | - | 80.97 | - | - | - | - | - | - | - | - | - | - | - |
| 13 | Woburn, | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Towns. | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Arlington, | - | - | - | - | - | - | - | 15.18 | - | - | - | - | - | - | 15.18 | - | - | - | - | - | - | - | - | - | - | - |
| 15 | Belmont, | - | - | - | 15.58 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 16 | Braintree, | 67.84 | - | - | - | - | - | - | - | - | - | - | - | - | - | 67.84 | - | - | - | - | - | - | - | - | - | - | - |
| 17 | Brookline, | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 18 | Canton, | 471.13 | - | - | - | - | - | - | - | 265.41 | - | - | - | - | - | 736.54 | - | - | - | - | - | - | - | - | - | - | - |
| 19 | Cohasset, | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 20 | Dedham, | - | - | - | - | - | - | - | 234.70 | - | - | - | - | - | - | 234.70 | - | - | - | - | - | - | - | - | - | - | - |
| 21 | Dover, | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 22 | Hingham, | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 23 | Hull, | - | - | - | - | - | - | - | - | - | - | - | - | 24.51 | - | 24.51 | - | - | - | - | - | - | - | - | - | - | - |
| 24 | Hyde Park, | - | - | 268.56 | - | - | - | - | 67.15 | - | - | - | - | - | - | 335.71 | - | - | - | - | .720 | - | - | - | - | - | .720 |
| 25 | Milton, | 1,499.42 | - | - | - | - | - | - | 270.39 | - | - | - | - | - | - | 1,769.81 | 2.250 | - | - | - | .400 | - | - | - | - | - | 2,650 |
| 26 | Nahant, | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2.230 | - | - | - | 2,230 |
| 27 | Needham, | - | - | - | - | - | 14.24 | - | - | - | - | - | - | - | - | 14.24 | - | - | - | - | - | - | - | - | - | - | - |
| | [Randolph], . . . | 257.00 | - | - | - | - | - | - | - | - | - | - | - | - | - | 257.00 | - | - | - | - | - | - | - | - | - | - | - |
| 28 | Revere, | - | - | - | - | - | - | - | - | - | - | 67.44 | - | - | - | 67.44 | - | - | 2.291 | - | - | - | - | - | .570 | - | 2,861 |
| 29 | Saugus, | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 30 | Stoneham, | - | 726.15 | - | - | - | - | - | - | - | - | - | - | - | - | 726.15 | - | - | - | - | - | - | - | - | - | - | - |
| 31 | Swampscott, . . . | - | - | - | - | - | - | - | - | 3.30 | - | - | - | - | - | 3.30 | - | - | - | - | - | - | - | - | - | - | - |
| 32 | Wakefield, | - | - | - | - | 23.09 | - | - | - | - | - | - | - | - | - | 23.09 | - | - | - | - | - | - | - | - | - | - | - |
| 33 | Watertown, | - | - | - | - | - | - | 75.23 | - | - | - | - | - | - | - | 75.23 | - | - | - | - | - | - | - | - | - | - | - |
| 34 | Wellesley, | - | - | - | - | - | 4.59 | 67.13 | - | - | - | - | - | - | - | 71.72 | - | - | - | - | - | - | - | - | - | - | - |
| 35 | Weston, | - | - | - | - | - | - | 77.05 | - | - | - | - | - | - | - | 77.05 | - | - | - | - | - | - | - | - | - | - | - |
| 36 | Westwood, | - | - | - | - | - | - | - | 7.40 | - | - | - | - | - | - | 7.40 | - | - | - | - | - | - | - | - | - | - | - |
| 37 | Weymouth, | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 38 | Winchester, . . . | - | 250.61 | - | - | - | - | - | - | - | - | - | - | - | - | 250.61 | - | - | 1.780 | - | - | - | - | - | - | - | 1,780 |
| 39 | Winthrop, | - | - | - | - | - | - | - | - | - | - | 16.73 | - | - | - | 16.73 | - | - | - | - | - | - | - | - | - | - | - |
| | | 4,857.96 | 1,882.95 | 463.72 | 58.35 | 23.09 | 23.10 | 563.20 | 289.44 | 926.41 | 10.81 | 67.44 | 16.73 | 37.97 | 24.51 | 9,245.68 | 2.280 | 4.605 | 5.240 | 2.900 | 1.510 | 1.120 | .520 | 3.326 | 2.230 | .690 | 24.421 |

generally made from the reserve list. It is a condition of the employment of the police that they shall be ready and willing to do such work as is required of them when their services are not needed as police. As a result, much valuable work is done by the police force during the winter months, when the reservations are less visited by the public. A small number of laborers is kept in all of the large reservations, which is added to as occasion requires.

Landscape Architects.

Messrs. Olmsted Brothers of Brookline continue to be the landscape advisors of the Commission. Their report is annexed, showing in what matters they have advised the Board, and submitting such suggestions as have been brought to their attention in the course of their work.

Engineering Department.

The report of the Engineer printed herewith gives in detail the work of his department. Two important pieces of work in his charge have been completed during the year. Revere Beach Parkway from Main Street, Everett, to Charles Eliot Circle at the southern end of Revere Beach Reservation, has been completed, with the exception of about 1,000 feet at the point where it crosses the Eastern Division of the Boston & Maine Railroad near Revere Station. This link will be filled in next spring, when the work of building a joint overhead bridge in connection with the separation of the grades of the railroad and the highway known as Winthrop Avenue is finished. This latter work is being done by the railroad under the direction of the Engineer. A section of Charles River Road in Watertown, extending from Watertown Square to the United States Arsenal, has also been completed and opened to public use. This section is a mile long. The building of Mattapan Bridge across the Neponset River, the entrance of Blue Hills Parkway in Milton, has for various reasons progressed very slowly. This is a concrete and steel Melan arched bridge, with rock facings and parapet walls. The concrete and stone work are substantially finished. The surfacing of the roadway,

however, will have to wait until the frost is out of the ground in the spring. It is apparent already, however, that the bridge is not only to serve as a great convenience, but will rank as a work of artistic excellence in bridge construction.

Another important work in charge of the Engineer is the building of Wellington Bridge, which is to carry the Middlesex Fells Parkway across the Mystic River between Somerville and Medford, and is also to take the place of the present Middlesex Avenue Bridge, a short distance east of the new bridge. It is to be a pile bridge, 950 feet long between abutments. It will be 70 feet wide, and includes a steel retractile draw with an opening of 50 feet. The contract for the abutments was let in August, and this portion of the work is nearly finished. Satisfactory proposals for the bridge structure have been obtained, and specifications and plans for the draw will soon be ready. It is hoped to have the bridge open for use by next fall, and the old bridge will then be removed.

The Engineer has also had charge of many minor works of construction and repair in the various reservations and parkways. There has also been prepared by the department the usual number of plans required for construction, takings, abandonments, sales and for use in trial of cases by the Attorney-General's department. The Engineering Department has also furnished inspection in the increasing number of matters where this Commission is called upon to grant rights of way for public uses to other public Boards carrying on improvements in or adjacent to the park lands.

Law and Claims Department.

Satisfactory progress has been made the past year in the settlement of claims for the taking of lands. One hundred and seventy-eight claims have been adjusted, the total amount paid being \$445,349.73. One hundred of these claims were for land taken for reservations, and are divided as follows: Charles River, 36; Neponset River, 31; Mystic River, 24; Quincy Shore, 3; Nantasket Beach, 3; Middlesex Fells, 1; Lynn Shore, 1; Winthrop Shore, 1. Seventy-eight of

these claims were for land taken for parkways, and are divided as follows: Revere Beach Parkway, 48; Furnace Brook Parkway, 17; Middlesex Fells Parkway, 7; Fresh Pond Parkway, 2; Mystic Valley Parkway, 2; Neponset River Parkway, 2. Suit had been brought on 69 of the claims, and the remaining 109 were settled without litigation. Thirteen cases were tried by the Attorney-General's department, and a verdict obtained. There are still 158 outstanding unsettled claims, of which 115 are for takings for reservations and 53 for parkways. The awards and estimates in these unsettled claims amount to \$212,352.59.

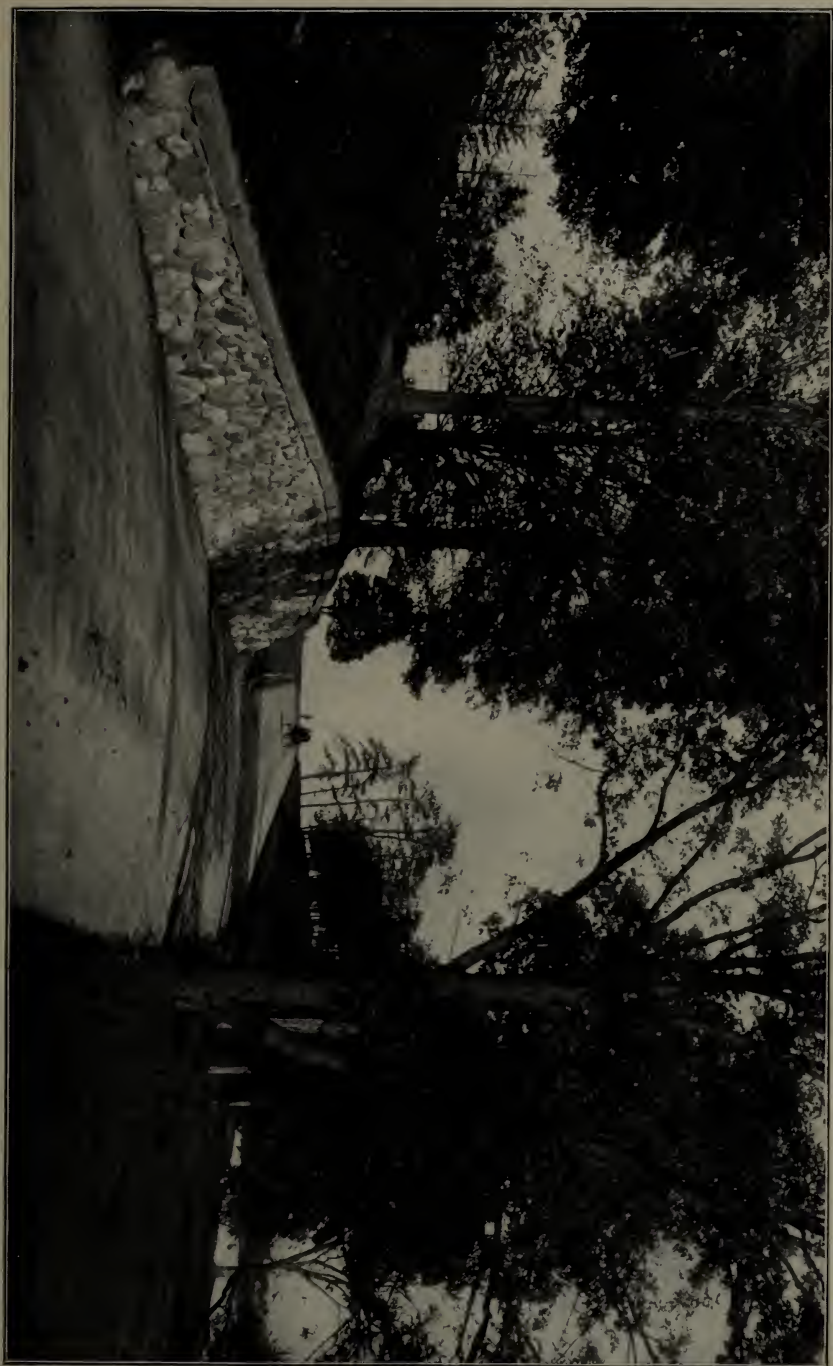
Superintendence.

There is a large amount of annually recurring work in the reservations and parkways of routine character which only calls for general mention. The first great care is fire protection, which requires especial attention in the spring before the new vegetation has started, and again in the fall when the fallen leaves have not yet been covered with snow and are often in the condition of tinder. High winds and drought add greatly to the danger. Fireguards are kept clear and woods roads and paths are often raked. A fire patrol is maintained with a simple set of signals, and a wagon with all materials for fighting a woods fire is always in readiness at the headquarters of the reservation. Many fires get started every season, and most often in woods just outside the boundaries, but no serious woods fire has damaged the reservations since they were acquired by this Commission. In the larger wooded reservations a few permanent roads have been built, but there are many miles of woods roads and paths which have been put in condition for temporary use. In some instances sections of highways passing through or along the reservations have also been put in the care of this Commission by the local authorities. In round numbers this means the annual care of about 100 miles of streets, roads and paths. This work is of course heavier in the spring, when general repairs are necessary, but considerable work is also required during the summer and fall, when these reservations are most in use. No special appropriation has

yet been made for forestry work, but considerable is done with the regular force, especially during the winter season, in the line of encouraging and preserving the better growth. At the beaches during the summer months the roads and the beach itself have to be kept clean and in proper condition for the crowds which make use of them. The bath-houses also require additional assistance. In winter the laboring force is reduced to a minimum. There is, however, a considerable amount of work to be done in the spring to get these reservations in order for the summer season, and in the case of the great bath-house at Revere there is ample work between seasons for a small body of men in closing and opening and making necessary repairs. In the river reservations the work of superintendence so far is largely confined to the Charles River, where there have been considerable improvements made, both on the lower section which includes the Speedway, and on the upper section which includes the boating region and Hemlock Gorge. The use of the river is largely confined to the summer and fall, although there is some skating on the upper section. Considerable is accomplished, however, each year, not only on the Charles, but also on the Mystic and Neponset, in the cleaning of the banks and improvement of the vegetation and the growth along the shores.

A word should be added in regard to the police. The gradual improvement of the reservations and construction of parkways and the consequent increase of public use has made it necessary to provide from time to time additional police protection, until the total number of regular and reserve police is now 69. The Commission does not gauge the value of park policing by the number of arrests made, but by the standard of order maintained in the portions of the district for which it is responsible. The police are instructed that it is a part of their duty, in addition to maintaining order, to do what they properly may to add to the comfort and pleasure of the public by whom and for whom the parks and parkways have been made. Although the public use of the parks has been greater during the past few years, the number of arrests has not materially increased,

CHARLES RIVER RESERVATION.—CHARLES RIVER ROAD.



and the standard of order has certainly not fallen. It would seem that some of the credit for this desirable condition of things may be properly ascribed to a conscientious performance of duty by the park police.

Matters relating to particular reservations and parkways can be most concisely stated by treating them in the groups into which they are divided for purposes of administration.

Blue Hills division; Frank Dings, Superintendent: —

In the *Blue Hills Reservation* a part of Hillside Street was rebuilt last year. This year the work has been continued and completed from the office to the Canton line. Marigold Valley has been cleaned and kept open in accordance with the suggestions made by the Landscape Architects. Twelve hundred feet of fence was rebuilt in the Henry L. Pierce devise. The north-east boundary was cut out from Sawcut Notch to Bunker Hill, and the south-east boundary from Purgatory Road to West Street in Braintree. Forestry work was carried out on the east side of Houghton Plains, the west side of Breeze Hill, in the Wolcott Pines, on the north slope of Chicatawbut Hill and in the Pierce devise.

A portion of the *Blue Hills Parkway* in Milton where there are no cross streets has been arranged for speeding. As the road is a double one, the westerly roadway is left open for traffic and to afford an opportunity for observing the sport.

On *Quincy Shore Reservation* a low place has been filled to abate a nuisance, at the request of officials of the city.

On the land taken for the *Furnace Brook Parkway* it has been necessary to repair several existing roads and bridges. The Metropolitan Water and Sewerage Board have now completed that section of the Neponset sewer which passes through the parkway below Adams Street. It is desirable that some work should be done soon to bring about the gradual restoration of the former attractiveness of this portion of the parkway.

In the *Stony Brook Reservation* there has been a small amount of planting done and some forestry work.

Along the *Neponset River* considerable cleaning and

fencing has been done. Especial attention has been given to the trees along the banks.

Middlesex Fells division; Charles P. Price, Superintendent:—

In the *Middlesex Fells* special work has been done in the repair of both the interior and town roads. A portable stone crusher has been set up near the Medford Water Works station, and has been supplied with stone through an arrangement with the Metropolitan Water and Sewerage Board, which has been laying a pipe line to Spot Pond through this portion of the reservation. This supply of crushed stone is conveniently located for use upon the town roads in the Fells and the parkways adjacent to the Fells. A steam roller which was purchased last year for use in the northerly portions of the park system has been housed in a shed built this year in the Fells. Additional sheds have also been built near the office for the storage of wagons and materials. A large farm on the Andover turnpike in the heart of the Fells was formerly used as a piggery. The Landscape Architects advised that it should be kept open, both for the landscape effect and also on account of its future recreative value. Most of the old buildings have been removed, and some forestry work done along the borders of the open pasture. To keep the pasture land open, the gift of a small flock of sheep has been accepted and a simple sheep-fold built by the employees of the reservation from plans prepared by the Superintendent. In Dark Hollow Pond, just beyond the farm, tame duck have been cared for during the past two summers. In winter they find their way to headquarters across Spot Pond. The Superintendent has also kept a small collection of wild birds and animals in the grounds near the office. This animal life appears to have much interested visitors to the reservation. The work of keeping down the ravages of the gypsy and brown-tail moths has been greater than was anticipated. The sections to which especial attention was given last year are in fairly good condition this fall, but other sections will require considerable attention this winter. This is especially true along the border roads, where the moths appear to have found

their way across from private lands upon which nothing has been done to control the pest. In many places the bark of the trees along the roadways is spotted all over with the yellow egg-clusters of the gypsy moth. These egg-clusters can easily be found and treated during the winter, while the trees are free from leaves.

Considerable portions of the *Middlesex Fells Parkway* have been resurfaced. The trees have also been protected against the gypsy and brown-tail moths.

The Medford section of *Mystic Valley Parkway* has been resurfaced. In Winchester the parcel of land south of Abbajona River which was given by Mr. Edward Ginn has been named Ginn Field. The low land is being filled, and a foot-bridge built to connect it with the roadway. Manchester Field is now completed as a playground, and is ready to be transferred to the Park Commission of Winchester in accordance with the understanding between the two commissions. This parkway has required especial attention on account of the presence, especially in the Medford section, of the gypsy and brown-tail moths.

Revere Beach division; Herbert W. West, Superintendent: —

The use of *Revere Beach Reservation* still increases each year. The owners of amusement enterprises and shopkeepers fronting on the reservation were again allowed to arrange a "carnival," during which several popular amusements were furnished on the beach, and a coaching and bicycle parade held on the driveway. Additional brick sidewalk has been laid near the bath-house. The water service has been extended northerly from the bath-house to Revere Street. At this point an additional sanitary building has been erected. The contract was awarded to H. P. Cummings Company of Boston, whose bid was \$3,568. A house has also been built to be occupied by the Superintendent at Charles Eliot Circle. The contract price was \$7,800, and the contractor was C. C. Blanchard of Lynn. Additional shed and stable room have also been provided in the bath-house yard adjoining the police station.

The *Revere Beach Bath-house* was used by 113,783 per-

sons, as against 170,993 for the previous year. The falling off is to be accounted for by the unusually bad weather for bathing. The record for a single day, however, was surpassed on Labor Day, September 1, when the bath-house was patronized by 8,721 bathers. The addition of the boys' bath-room made this possible. In this large room with benches the boys dress and undress, leaving their clothing in lockers, and receive a check therefor instead of a key. This room will take care of 500 boys at a time, and on hot days greatly relieves the line of men bathers waiting for bath-rooms.

The Commission, in view of the previous successful season decided to try the experiment this year of reducing the prices at the bath-house, and on the opening of the bath-house fixed the price for adults at twenty cents. By July 26 it became clear that the reduction in price would result in a serious deficit, for which no appropriation was available. The Commission, therefore, restored the price for adults to twenty-five cents. The restoration of the price and the improvement in the weather for bathing purposes resulted in keeping the deficit slightly within the surplus left from the previous summer's receipts. The total amount of receipts was \$23,242.85, and the expenditures were \$29,566.89.

On May 24 *Revere Beach Parkway* was opened to public use from Everett to the beach, except at Winthrop Avenue near the Revere Station, where it is still necessary to use the highway until the bridge over the tracks is completed. It has been used by constantly increasing numbers. At one section of the double road in Everett where there are no cross roads speeding has been allowed, and advantage of the opportunity has been taken by a large number of horsemen. A tool house and office has been built about halfway between the Everett and Revere ends, and telephones for police service have been installed.

The damage to the driveway and promenade at *Winthrop Shore* in November of last year was so great that it had to be kept closed during the winter. It was repaired and opened again on May 1. Sections of the promenade are being experimented with, to see which of several methods

will give best protection against the overwash of the sea. It will be necessary to so protect the outer promenade as soon as the best method can be determined. Last winter the Legislature passed an act relieving the town of Winthrop from the obligation to pay the entire maintenance of this reservation, thus placing this reservation permanently in the control of this Commission. A tool house and office with telephone connection with Revere Beach has, therefore, been placed at the westerly end of the reservation.

Lynn Shore and King's Beach Reservation has been policed and slight repairs have been made to the sea-walls. Considerable damage has been done by storms, owing to the unprotected condition of the greater part of the frontage.

Nahant Beach Parkway has been policed and kept clean. After it was decided that the proposed bath-house would not be built this year, it was found necessary to build a sanitary building of temporary character and a small locker for tools.

Charles River, Riverside Section; Albert N. Habberley, Superintendent: —

The use of the upper river for boating continues to increase. There are at least three thousand canoes in regular use in this section of the river during the season. The river has been patrolled in boats, as before. Eighty cases of upsets from boats have been reported. Thirty-six of these were actual rescues from the water by the police. The others have been brought into the office, or have come in themselves for assistance after getting ashore. Last winter a young woman was drowned at Waltham while skating. One drowning accident also occurred during the summer from the upsetting of a canoe. The three other occupants of the canoe were rescued by the officer on patrol. Land for the erection of a public boat-house near Weston Bridge in Auburndale has been leased to Messrs. Robertson & Emerson, and they have built a boat-house on plans approved by the Commission. Considerable work has been done for the improvement of the river banks. Dead wood has been removed from the groves, and some planting and seeding done. A wire fence has been built on the boundary lines of the Riverside Recreation Grounds. The Metropoli-

tan Water and Sewerage Board are carrying a pipe line across the river and through the reservation just below Weston Bridge. The line has been located so as to avoid injury to the reservation. A permanent headquarters building is much needed for this section. The present quarters, in an old boat-house, are inadequate and inconvenient.

Some forestry work has been done at *Hemlock Gorge Reservation*. The location of the Newton sewer through the reservation, which was built last year, has been loamed and seeded. Repairs have been made to the dam. The widening of Worcester Street in Wellesley, in conjunction with the building of the Boston & Worcester Street Railway, has destroyed all the undergrowth along the edge of Reservoir Pond, and it will be difficult to preserve the trees. The town has agreed to restore the bank and build the street at this point according to plans prepared by the Landscape Architects. A bridge across the river at the upper end of the reservation, formerly used in connection with the picnic park, is no longer required, and will be removed this winter.

Charles River, Speedway Section; John L. Gilman, Superintendent: —

The half-mile section of the Speedway itself was resurfaced this spring, and the result was very satisfactory. Its use by horsemen gradually increases, and during the season it was used by something over twelve thousand teams. The dike has been regraded wherever settlements have developed, and the boundary road repaired. On June 7 the driving clubs of Boston and vicinity held their annual "Speedway Parade." The weather was again unpleasant, but about three hundred took part in the parade. Portions of the marsh now protected by the dike have been ploughed and planted, in order to improve the soil for tree planting. Charles River Road in Watertown, referred to under the Engineering Department, was opened to the public on August 6, and has been kept in repair and policed. At Gerry's Landing some grading was done in the rear of Cambridge Hospital. At Watertown all but one of the old buildings formerly of the Walker-Pratt Foundry have been torn down and the land graded, opening the view of the river

from Watertown Square. The gypsy and brown-tail moths have shown themselves, especially on the Cambridge side of the river, and have required considerable attention.

Fresh Pond Parkway and Lowell Memorial Park in Cambridge have required only general care.

Beaver Brook Reservation; Robert Elder, Superintendent: —

Beaver Brook Reservation at Waverley has again been used by great numbers of people. This is due both to its natural attractions and to its accessibility by electric cars. A portable house used as a lunch stand was placed in the lower part of the reservation, and the privilege let to a tenant. During the winter months the ponds were largely used by skaters. The culvert across Trapelo Road has been changed in position, and the course of Beaver Brook slightly altered to conform with the change. The oaks and the other large trees have had especial care this fall, under expert advice. The gypsy and brown-tail moths have also appeared in this region.

Nantasket Beach Reservation; Moody Leighton, Superintendent: —

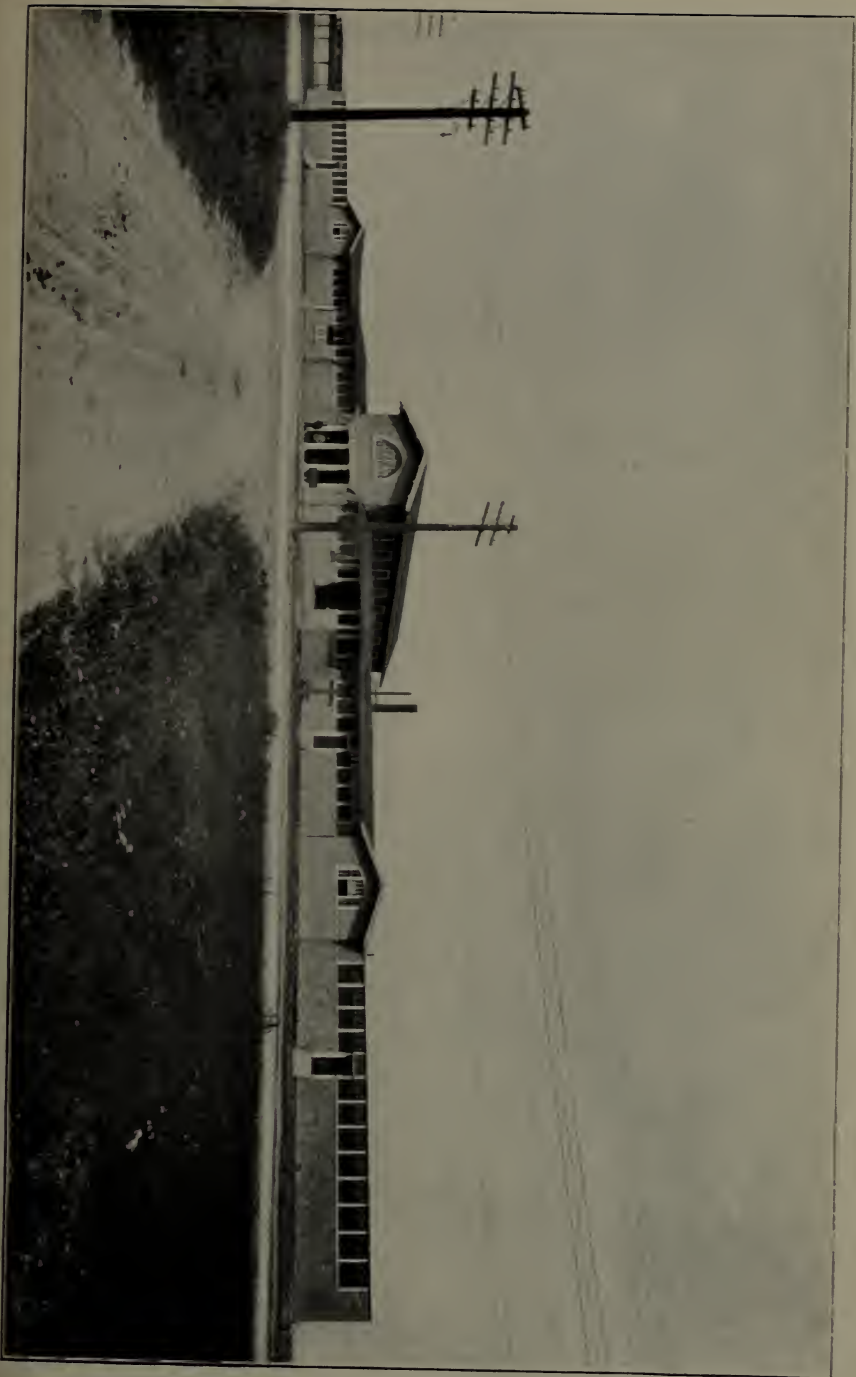
Several new buildings have been erected, and alterations in the old buildings made. This has made possible a rearrangement with the end in view of increasing the attractiveness of the reservation, and at the same time adding to the convenience of administration. These changes have also been made having in mind the probable future development of the reservation, if any of the old buildings should be removed.

The new bath-house was completed and opened June 21. It is located to the east of the hotel, and has a frontage on the beach of 335 feet and a depth of 62 feet. The administration department is placed in the centre of the façade, and is of higher stud than the remainder of the building. The public can enter either from the County Road on the south side or from the plank walk on the north side into a 26-foot corridor, running clear through from front to rear, and 25 feet high. On either side of this corridor are the cashiers' desks, registering turnstiles and counters for the delivery of

bathing suits to applicants. Beyond the counters and near the doorways into bath yards are rooms for the checking of valuables. The bath yards are built on similar lines to those at Revere Beach, consisting of stud and shingled walls, enclosing 200 dressing rooms on one side and 192 on the other. These dressing rooms are roofed, leaving the corridors open to the sky. Toilet rooms for bathers only are conveniently located opposite the broad stairs which lead down from the level of the bath yard and under the plank walk to the beach. Foot tubs with hot and cold water showers are placed near the head of the stairs. At the ends of all the principal corridors are exit doorways, to be used only in emergencies. An office for the superintendent and storage rooms for the bathing suits and towels open into the main corridor of the administration department. On the water side there is a wide plank walk connecting with the hotel piazzas. The entire building is of frame construction, covered with shingles left unstained. The roofs are composition and painted red, the trimmings are clear white, and doors and lattice screens a delicate green. Floors are of matched hard pine, and interior finish is of gulf cypress.

The contract was awarded to H. P. Cummings Company, the lowest bidders, for the sum of \$21,731.

Next to the bath-house on the west is a shelter building, which is built in part of the piazza of a hotel which formerly stood on this part of the beach. A board walk connects this shelter with the hotel, and is continued in effect by the broad piazzas of the hotel. The police quarters have been removed from the archway between the hotel and the café building, and the space utilized for a lunch stand and other restaurant purposes. Improvements have also been made to the band stand, which is on the beach, so that the music is now heard to better advantage on the piazzas and in the pavilion of the hotel. Considerable changes have been made in the kitchen and laundry of the café, and the hotel administration is now screened from the street. West of the hotel, where the old bath-houses stood, a new pavilion and shelter has been built, connected by a board walk with the



NANTASKET BEACH RESERVATION.—THE BATH-HOUSE.

hotel piazza. This board walk continues on to the merry-go-round, and by this building to the roller coaster, which has been rebuilt by the owner at the westerly terminus of the board walk. The administration buildings of the reservation are on the opposite side of Nantasket Avenue, between the railroad and the street. Beginning at the end towards the steamboat pier and railroad station is the police station, which was finished last year. In the rear is the hose house, containing the fire apparatus. West of these buildings is the dormitory occupied by the police force. Next is a sanitary building, and beyond this the new boiler and laundry house. The contract price for this building was \$9,341, and the contractor was the H. P. Cummings Company. The boiler plant supplies steam for the bath-house laundry, roller coaster, merry-go-round, and the hotel laundry and kitchens. There are two 120 horse-power boilers, and the usual appurtenances to such a plant. The Walworth Construction Company was the contractor for the boiler plant, and the contract price was \$5,434. The laundry plant was installed by the Poland Laundry Machinery Company, whose bid was \$4,424. It consists of three washers, one tumbler, three extractors, dry room, and one Standard Annihilator Mangle, together with the usual appurtenances, shafting, etc.

The architects of the bath-house and laundry buildings were Messrs. Stickney & Austin, who also had charge of the alterations in the old buildings. Densmore & LeClear were the mechanical engineers who laid out and superintended the installation of the steam plant and laundry. The alterations in the old buildings were done by day work by William J. Nelson, who has also built for the Commission a piece of bulkhead between the bath-house and an existing bulkhead to the east.

Proposals were invited for the hotel and restaurant privilege for a three years' lease, which was awarded to E. F. Sturgis, he being the highest bidder. The roller coaster and merry-go-round privileges were also let for three years to Charles N. Grant, and the building with store privileges on the way to the steamboat landing for the same term to James

W. Hutchins. The bath-house was run by the Commission on the same lines as the one at Revere, at the following scale of prices : —

| | Cents. |
|---|--------|
| For use of bathing suit, towel and dressing room, | 25 |
| For use of towel and dressing room, | 20 |
| For use of child's suit, towel and dressing room, | 10 |

The bath-house was used by 22,905 persons. The largest day was on Labor Day, September 1, when there were 1,709 bathers. The total of receipts from the bath-house was \$6,645.70, including \$1,550 received from lessees for steam supplied them from the laundry plant. The expenditures were \$7,868.04.

The reservation was very largely used by the public, especially during the last part of the season, when the weather was more favorable, and good order was maintained.

3. MISCELLANEOUS.

There was printed in the last report the award of the special commission appointed by the Supreme Court, apportioning the cost of the Metropolitan Park System and the expense of maintenance among the cities and towns of the District. At that time the report was before the Supreme Court on appeal. Since that time the award has been confirmed by the Supreme Court, and the annual payments for the years 1900, 1901 and 1902 have been paid by the cities and towns of the District to the State, in accordance with the award. The members of the Apportionment Commission have filed in this office for preservation a somewhat fuller statement of the method pursued by them in making their award than appears in the award itself, and as a matter of public interest it is printed with Appendix matter.

Several applications for street railway locations in reservations and parkways have been made to the Commission under the provisions of chapter 413 of the Acts of the year 1900. A location in the Blue Hills Parkway has been granted to the Old Colony Street Railway Company from Mattapan Square to Brook Road. No locations have yet been granted in any of the reservations.



NANTASKET BEACH RESERVATION.—INTERIOR OF BATH-HOUSE.

This Commission was invited to present its opinions and views in regard to the improvement of the Charles River Basin to the Charles River Dam Committee, created by chapter 105 of the Resolves of the year 1901. The Chairman of this Commission appeared before that Committee, in accordance with the following vote of the Commission:—

Voted, That as a basis of such expression of opinions and views, this Commission records its belief that the health and welfare of the community will be benefited by maintaining a water level as nearly as possible permanent in the Charles River between Craigie Bridge and the dam at Watertown, and its further belief that it is possible at this time to provide economically for such permanent level by structures and regulations which will secure for that river healthful conditions, improved commercial opportunities and greatly increased usefulness as a water park.

It was the intention of the Commission to proceed this year with the construction of the Saugus River Bridge, authorized by chapter 547 of the Acts of the year 1898. Their attention having been called to the fact that the Highway Commission would be unable to construct the approach to the Lynn end of the bridge, it was decided to postpone the building of the bridge.

4. FINANCES.

The following tables show in brief form the expenditures under the various park loans for the year ending Dec. 1, 1902:—

METROPOLITAN PARKS LOAN FUND.

Blue Hills Reservation:—

| | | |
|--------------------------|----------|----------|
| Miscellaneous, | \$623 59 | \$623 59 |
|--------------------------|----------|----------|

Middlesex Fells Reservation:—

| | | |
|--------------------------|------------|----------|
| Land, | \$3,382 45 | |
| Miscellaneous, | 830 68 | |
| | <hr/> | 4,213 13 |

Revere Beach Reservation:—

| | | |
|--------------------------|----------|----------|
| Land, | \$50 00 | |
| Miscellaneous, | 1,206 95 | |
| | <hr/> | 1,256 95 |

Stony Brook Reservation:—

| | | |
|--------------------------|----------|--------|
| Miscellaneous, | \$300 83 | |
| | <hr/> | 300 83 |

Beaver Brook Reservation:—

| | | |
|--------------------------|----------|----------|
| Miscellaneous, | \$251 12 | |
| | <hr/> | \$251 12 |

Hemlock Gorge Reservation:—

| | | |
|--------------------------|----------|--------|
| Miscellaneous, | \$127 11 | |
| | <hr/> | 127 11 |

Charles River Reservation:—

| | | |
|--------------------------|--------------|------------|
| Land, | \$102,145 52 | |
| Miscellaneous, | 58,029 57 | |
| | <hr/> | 160,175 09 |

Neponset River Reservation:—

| | | |
|--------------------------|-------------|-----------|
| Land, | \$41,989 47 | |
| Miscellaneous, | 9,133 22 | |
| | <hr/> | 51,122 69 |

Mystic River Reservation:—

| | | |
|--------------------------|-------------|-----------|
| Land, | \$48,383 93 | |
| Miscellaneous, | 2,542 31 | |
| | <hr/> | 50,926 24 |

Lynn Shore Reservation:—

| | | |
|--------------------------|------------|----------|
| Land, | \$8,407 50 | |
| Miscellaneous, | 148 32 | |
| | <hr/> | 8,555 82 |

Quincy Shore Reservation:—

| | | |
|--------------------------|------------|----------|
| Land, | \$4,750 00 | |
| Miscellaneous, | 724 00 | |
| | <hr/> | 5,474 00 |

Winthrop Shore Reservation:—

| | | |
|--------------------------|----------|--------|
| Land, | \$339 00 | |
| Miscellaneous, | 545 51 | |
| | <hr/> | 884 51 |

King's Beach Reservation:—

| | | |
|--------------------------|---------|-------|
| Miscellaneous, | \$83 30 | |
| | <hr/> | 83 30 |

Wellington Bridge:—

| | | |
|--------------------------|-------------|-----------|
| Miscellaneous, | \$16,797 09 | |
| | <hr/> | 16,797 09 |

| | | |
|----------------------------|--|----------|
| General expense, | | 3,707 54 |
|----------------------------|--|----------|

\$304,499 01

METROPOLITAN PARKS LOAN FUND, SERIES II.

Blue Hills Parkway:—

| | | |
|--------------------------|-----------|-------------|
| Land, | \$600 00 | |
| Miscellaneous, | 30,609 97 | |
| | <hr/> | \$31,209 97 |

Middlesex Fells Parkway:—

| | | |
|--------------------------|------------|----------|
| Land, | \$4,214 35 | |
| Miscellaneous, | 2,326 52 | |
| | <hr/> | 6,540 87 |

Mystic Valley Parkway:—

| | | |
|--------------------------|-------------|-------------|
| Land, | \$26,025 00 | |
| Miscellaneous, | 4,182 62 | |
| | <hr/> | \$30,207 62 |

Revere Beach Parkway:—

| | | |
|--------------------------|--------------|------------|
| Land, | \$161,485 95 | |
| Miscellaneous, | 59,124 93 | |
| | <hr/> | 220,610 88 |

Neponset River Parkway:—

| | | |
|--------------------------|------------|----------|
| Land, | \$5,250 00 | |
| Miscellaneous, | 561 88 | |
| | <hr/> | 5,811 88 |

Fresh Pond Parkway:—

| | | |
|--------------------------|------------|----------|
| Land, | \$7,233 04 | |
| Miscellaneous, | 293 56 | |
| | <hr/> | 7,526 60 |

Furnace Brook Parkway:—

| | | |
|--------------------------|-------------|-----------|
| Land, | \$45,908 34 | |
| Miscellaneous, | 3,578 06 | |
| | <hr/> | 49,486 40 |

Nahant Beach Parkway:—

| | | |
|--------------------------|------------|----------|
| Miscellaneous, | \$1,272 62 | |
| | <hr/> | 1,272 62 |

Charles River Speedway:—

| | | |
|--------------------------|---------|-------|
| Miscellaneous, | \$78 83 | |
| | <hr/> | 78 83 |

Blue Hills Roads:—

| | | |
|--------------------------|---------|-------|
| Miscellaneous, | \$67 20 | |
| | <hr/> | 67 20 |

Middlesex Fells Roads:—

| | | |
|--------------------------|---------|-------|
| Miscellaneous, | \$41 69 | |
| | <hr/> | 41 69 |

Lynnway:—

| | | |
|--------------------------|----------|--------|
| Miscellaneous, | \$248 87 | |
| | <hr/> | 248 87 |

| | | |
|----------------------------|--|----------|
| General expense, | | 3,721 44 |
|----------------------------|--|----------|

\$356,824 87

NANTASKET BEACH LOAN.

| | | |
|--------------------------|-------------|-------------|
| Land, | \$24,860 00 | |
| Miscellaneous, | 50,006 66 | |
| | <hr/> | \$74,866 66 |

The following tables show the total amount expended in each loan and the cost of each reservation and parkway to

Dec. 1, 1902, and the amounts charged by the Auditor's department to meet the sinking fund and interest requirements to Jan. 1, 1900:—

METROPOLITAN PARKS LOAN FUND.

Blue Hills Reservation:—

| | | |
|--------------------------|--------------|--------------|
| Land, | \$357,847 79 | |
| Miscellaneous, | 242,080 91 | |
| | <hr/> | \$599,928 70 |

Middlesex Fells Reservation:—

| | | |
|--------------------------|--------------|------------|
| Land, | \$685,381 43 | |
| Miscellaneous, | 208,333 69 | |
| | <hr/> | 893,715 12 |

Revere Beach Reservation:—

| | | |
|--------------------------|----------------|--------------|
| Land, | \$1,139,811 21 | |
| Miscellaneous, | 579,001 16 | |
| | <hr/> | 1,718,812 37 |

Stony Brook Reservation:—

| | | |
|--------------------------|--------------|------------|
| Land, | \$280,281 37 | |
| Miscellaneous, | 74,646 05 | |
| | <hr/> | 354,927 42 |

Beaver Brook Reservation:—

| | | |
|--------------------------|-------------|-----------|
| Land, | \$29,819 29 | |
| Miscellaneous, | 20,034 07 | |
| | <hr/> | 49,853 36 |

Hemlock Gorge Reservation:—

| | | |
|--------------------------|-------------|-----------|
| Land, | \$53,254 00 | |
| Miscellaneous, | 14,700 51 | |
| | <hr/> | 67,954 51 |

Charles River Reservation:—

| | | |
|--------------------------|----------------|--------------|
| Land, | \$1,401,692 06 | |
| Miscellaneous, | 196,347 16 | |
| | <hr/> | 1,598,039 22 |

Neponset River Reservation:—

| | | |
|--------------------------|--------------|------------|
| Land, | \$167,358 83 | |
| Miscellaneous, | 37,666 99 | |
| | <hr/> | 205,025 82 |

Mystic River Reservation:—

| | | |
|--------------------------|--------------|------------|
| Land, | \$165,458 15 | |
| Miscellaneous, | 17,130 27 | |
| | <hr/> | 182,588 42 |

Lynn Shore Reservation:—

| | | |
|--------------------------|-------------|-----------|
| Land, | \$94,798 90 | |
| Miscellaneous, | 1,645 23 | |
| | <hr/> | 96,444 13 |

Quincy Shore Reservation: —

| | | |
|--------------------------|-------------|-------------|
| Land, | \$49,198 00 | |
| Miscellaneous, | 5,829 00 | |
| | <hr/> | \$55,027 00 |

Winthrop Shore Reservation: —

| | | |
|--------------------------|-------------|------------|
| Land, | \$20,648 00 | |
| Miscellaneous, | 159,500 63 | |
| | <hr/> | 180,148 63 |

Hart's Hill Reservation: —

| | | |
|--------------------------|-------------|-----------|
| Land, | \$10,000 00 | |
| Miscellaneous, | 103 95 | |
| | <hr/> | 10,103 95 |

King's Beach Reservation: —

| | | |
|--------------------------|-------------|-----------|
| Land, | \$23,847 21 | |
| Miscellaneous, | 1,264 23 | |
| | <hr/> | 25,111 44 |

West Roxbury Parkway: —

| | | |
|--------------------------|--------------|------------|
| Land, | \$244,976 01 | |
| Miscellaneous, | 8,313 67 | |
| | <hr/> | 253,289 68 |

Wellington Bridge: —

| | | |
|--------------------------|-------------|-----------|
| Miscellaneous, | \$16,797 09 | |
| | <hr/> | 16,797 09 |

| | | |
|----------------------------|--|------------|
| General expense, | | 131,166 47 |
|----------------------------|--|------------|

\$6,438,933 33

Sinking fund requirements to 1896, . . . \$18,980 18

Care and maintenance to July 1, 1896, . . . 85,813 46

Care and maintenance July 1, 1896, to Jan.

1, 1896, 19,604 06

Sinking fund assessment for 1897, . . . 63,630 70

Sinking fund assessment for 1898, . . . 9,755 55

Sinking fund assessment for 1899, . . . 64,224 00

Interest, 23,318 61

290,326 56

Total charged to Dec. 1, 1902, \$6,729,259 89

METROPOLITAN PARKS LOAN FUND, SERIES II.

Blue Hills Parkway: —

| | | |
|--------------------------|--------------|--------------|
| Land, | \$133,492 02 | |
| Miscellaneous, | 178,971 97 | |
| | <hr/> | \$312,463 99 |

Middlesex Fells Parkway: —

| | | |
|--------------------------|--------------|------------|
| Land, | \$209,959 74 | |
| Miscellaneous, | 436,689 64 | |
| | <hr/> | 646,649 38 |

Mystic Valley Parkway:—

Land, \$196,789 20

Miscellaneous, 206,493 52

\$403,282 72

Revere Beach Parkway:—

Land, \$445,175 18

Miscellaneous, 464,402 23

909,577 41

Neponset River Parkway:—

Land, \$36,404 26

Miscellaneous, 5,855 36

42,259 62

Fresh Pond Parkway:—

Land, \$42,286 25

Miscellaneous, 22,027 18

64,313 43

Furnace Brook Parkway:—

Land, \$89,656 73

Miscellaneous, 9,492 43

99,149 16

Nahant Beach Parkway:—

Miscellaneous, \$2,443 40

2,443 40

Charles River Speedway:—

Miscellaneous, \$472,973 60

472,973 60

Blue Hills Roads:—

Miscellaneous, \$6,189 61

6,189 61

Middlesex Fells Roads:—

Miscellaneous, \$45,075 10

45,075 10

Stony Brook Roads:—

Miscellaneous, \$37,183 45

37,183 45

Lynnway:—

Land, \$20,500 00

Miscellaneous, 337 74

20,837 74

Middlesex Fells and Lynn Woods:—

Miscellaneous, \$4,682 27

4,682 27

General expense, \$78,876 16

\$3,145,957 04

| | |
|--|-------------|
| Sinking fund requirement for 1896, | \$3,650 03 |
| Sinking fund assessment for 1897, | 14,057 10 |
| Sinking fund assessment for 1898, | 3,765 08 |
| Sinking fund assessment for 1899, | 15,396 00 |
| One-half interest, | 22,327 68 |
| | <hr/> |
| | \$59,195 89 |

Total charged to Dec. 1, 1902, \$3,205,152 93

NANTASKET BEACH LOAN.

| | |
|--------------------------|--------------|
| Land, | \$597,173 02 |
| Miscellaneous, | 102,188 76 |
| | <hr/> |

Total charged to Dec. 1, 1902, \$699,361 78

The appropriations heretofore made are as follows : —

METROPOLITAN PARKS LOAN FUND.

| | |
|---|----------------|
| Original appropriation, chapter 407, Acts of 1893, | \$1,000,000 00 |
| First Revere Beach Act, chapter 483, Acts of 1894, | 500,000 00 |
| Charles River Act, chapter 509, Acts of 1894, | 300,000 00 |
| Second Revere Beach Act, chapter 305, Acts of 1895, | 500,000 00 |
| General appropriation, chapter 466, Acts of 1896, | 1,000,000 00 |
| General appropriation, chapter 464, Acts of 1897, | 500,000 00 |
| General appropriation, chapter 530, Acts of 1898, | 1,000,000 00 |
| Revere Beach Bath-house Act, chapter 142, Acts of 1899, | 125,000 00 |
| General appropriation, chapter 396, Acts of 1899, | 300,000 00 |
| Charles River Improvement Act, chapter 465, Acts of 1900, | 50,000 00 |
| Fuller's Wharf Act, chapter 467, Acts of 1900, | 30,000 00 |
| General appropriation, chapter 445, Acts of 1901, | 450,000 00 |
| Mystic River Bridge Act, chapter 492, Acts of 1901, | 200,000 00 |
| | <hr/> |

\$5,955,000 00

| | |
|--|------------|
| To provide for interest and sinking fund requirements to 1900, chapter 311, Acts of 1897, | 900,000 00 |
| | <hr/> |

| | |
|---|----------------|
| Total amount of loans, | \$6,855,000 00 |
| Amounts received from sales of buildings, receipts from bath-house, fines, etc., | 198,334 01 |
| | <hr/> |

| | |
|--|----------------|
| Total, | \$7,053,334 01 |
| Total of amounts charged to loans, | 6,729,259 89 |
| | <hr/> |

Balance remaining in hands of State Treasurer, . . . \$324,074 12

METROPOLITAN PARKS LOAN FUND, SERIES II.

| | |
|--|----------------|
| Original boulevard, chapter 288, Acts of 1894, . . . | \$500,000 00 |
| General appropriation, chapter 472, Acts of 1896, . . . | 500,000 00 |
| General appropriation, chapter 521, Acts of 1897, . . . | 1,000,000 00 |
| Saugus Bridge Acts, chapter 547, Acts of 1898, . . . | 100,000 00 |
| General appropriation, chapter 428, Acts of 1899, . . . | 500,000 00 |
| Mattapan Bridge Act, chapter 443, Acts of 1900, . . . | 75,000 00 |
| Winchester Act, chapter 444, Acts of 1900, . . . | 50,000 00 |
| Revere Beach Parkway Act, chapter 445, Acts of 1900, . . . | 200,000 00 |
| General appropriation, chapter 172, Acts of 1902, . . . | 450,000 00 |
| | <hr/> |
| | \$3,375,000 00 |
| To provide for interest and sinking fund requirements to 1900, chapter 311, Acts of 1897, | 100,000 00 |
| | <hr/> |
| Total amount of loans, | \$3,475,000 00 |
| Receipts from sales, etc., | 29,907 41 |
| | <hr/> |
| Total, | \$3,504,907 41 |
| Amounts charged to loans, | 3,205,152 93 |
| | <hr/> |
| Balance remaining in hands of State Treasurer, . . . | \$299,754 48 |

NANTASKET BEACH LOAN.

| | |
|--|--------------|
| Appropriation, chapter 464, Acts of 1899, | \$600,000 00 |
| Appropriation, chapter 456, Acts of 1901, | 100,000 00 |
| | <hr/> |
| Total amount of loans, | \$700,000 00 |
| Receipts from rents, etc., | 5,881 50 |
| | <hr/> |
| Total, | \$705,881 50 |
| Amounts charged to loans, | 699,361 78 |
| | <hr/> |
| Balance remaining in hands of State Treasurer, . . . | \$6,519 72 |

Respectfully submitted,

JOHN WOODBURY,

Secretary.

DEC. 1, 1902.

REPORT OF THE LANDSCAPE ARCHITECTS.

HON. WILLIAM B. DE LAS CASAS,

Chairman, Metropolitan Park Commission, Boston, Mass.

SIR: — We beg to submit the following report for the year ending Nov. 30, 1902: —

Out of the increasing use of the several reservations and parkways have arisen very various questions, chiefly of local importance, which have called for our advice to the Board.

Some of these questions have involved the blocking out of general plans of development for certain areas or the extension or further detailing of general plans already formed, on account of the immediate or anticipated necessity of making these areas conveniently accessible and usable by the public, or of reaching some decision which would limit the possibility of future development if determined only by present considerations.

Of this sort have been such questions as those concerning electric car and traffic routes through the Blue Hills and the future permanent drives in that reservation; concerning the treatment of the woods in the Stony Brook Reservation, where a determination has been made of the areas to be maintained in certain well-marked types of growth, and of the positions of roads to exhibit the scenery composed by these masses; concerning the treatment of woods in the Middlesex Fells, where a good beginning has been made, with a similar determination; concerning the Beaver Brook Reservation, for which a preliminary general plan is nearly completed; concerning Nantasket Beach, for which a tentative general plan has been prepared, to serve as a guide in placing the numerous temporary improvements required to meet the pressing demands of public use; concerning the

extension of a driveway along the Charles River between Watertown and Cambridge; and concerning several other areas of less individual importance. In connection with the studies for treatment of the Fells Woods, it is worth noting here that since the abandonment of the work of the Gypsy Moth Committee of the State Board of Agriculture there has been an alarming increase in the numbers of that pest in the Fells. The damage to the woods next season will be very serious if drastic measures are not adopted to kill the egg-clusters before they hatch next spring. The Commonwealth, having adopted the policy of leaving to individual land owners the duty of fighting this pest, cannot afford to neglect the duty on its own land. Not only does the protection of its own woodland property require prompt action, but under the present system of individual responsibility the Commonwealth must not set the example of indifference, and permit the Fells to become a breeding-place for the distribution of the pest to private lands.

Some of the questions have involved changes in previous plans so as to adapt them to new conditions without sacrifice of the original purposes, such as the alteration of Middlesex Fells Parkway on either side of the new Wellington Bridge over Mystic River, and of the Revere Beach Parkway where affected by the approaches to the new street bridge over the railroad at Everett. Most of these changes have been of a minor character.

Some of the questions have concerned new local problems, arising from the need of meeting new public demands. Of this sort have been the propositions for a public bath-house on Mystic Lake, — a desirable object, although not in the location proposed by the local authorities; for an adequate headquarters building and launch house for the Charles River Reservation, plans for which have been prepared by Messrs. Stickney & Austin, in consultation with us; and for new entrances into parkways.

Requests of abutters upon park lands and others have been referred to us from time to time for report as to the desirability of granting them, in view of the probable effect on the future of the reservations.

Finally, our services as consultants have been given in several cases to public authorities or others who were conducting operations seriously affecting the holdings of the Commission or the approaches to them; thus, for example, we advised the Park Commission of the town of Weston in regard to planting lands abutting on the Charles River Reservation, and the Boston, Revere Beach & Lynn Railroad about the treatment of the bath-house station grounds.

In brief, we have prepared during the year 44 studies, 36 preliminary and general plans, 20 grading plans, 24 profiles and sections, 13 planting and forestry plans, 17 other plans, and 39 reports and explanatory letters.

Respectfully submitted,

OLMSTED BROTHERS.

DEC. 1, 1902.

REPORT OF THE ENGINEER.

Hon. WILLIAM B. DE LAS CASAS,

Chairman, Metropolitan Park Commission.

SIR : — I herewith present my eighth annual report, enumerating the work of the Engineering Department for the year ending Nov. 1, 1902.

Resignations have reduced the number employed from 22 at the beginning of the year, to 17 at the end, giving an average of 21 for the entire year. There has been no other change in organization, and the work has generally been under the supervision of the following division engineers : —

| | |
|-------------------------|-------------------|
| Construction, | JOHN R. RABLIN. |
| Surveying, | DAVID A. AMBROSE. |
| Drafting, | LOUIS V. FOSTER. |

During the past year the department has come under civil service rules, by order of the Civil Service Commissioners.

The total cost of conducting the department has been as follows : —

| | |
|-------------------------------|--------------------|
| Services, | \$23,244 39 |
| Equipment, | 60 39 |
| Operating expenses, | 1,282 77 |
| Total, | <u>\$24,587 55</u> |

Construction and maintenance work, done under supervision of this department, has amounted to \$119,541.20. The inspection of work performed under permits and licenses issued to cities, towns, corporations and individuals increases each year; 46 written orders, of the 391, given to the division engineers, were for this class of work.

An appraisal of the property in charge of the department, omitting the value of maps, plans, notes and records, is as follows : —

| | | |
|--|------------|------------|
| Equipment:— | | |
| Offices, | \$2,056 00 | |
| Surveying and drawing instruments, | 2,582 00 | |
| Miscellaneous, | 44 00 | |
| | <hr/> | \$4,682 00 |
| Supplies:— | | |
| General, | | 1,215 00 |
| | | <hr/> |
| Total, | | \$5,897 00 |

Received \$90 during the year from the sale of surveying instruments, and paid out \$37.60 for repairs thereon.

Details are given in the following sections of parkway and reservation, and in the tables appended.

PARKWAYS.

Blue Hills Parkway.—The construction of Mattapan Bridge is still incomplete. The contract, No. 53, was awarded originally to O'Hern & Berrigan, and then transferred to H. A. Hanscom Company, Sept. 18, 1901. The assurances of this firm led us to believe the work would be completed early in the summer of 1902, and the Commission gave all possible assistance to the contractors, that there might be no delay because of non-delivery of steel and stone. At this date all masonry is completed except pointing. The finishing of the pointing and the surfacing of roadways will remain to be done next spring. The total estimated cost to Nov. 1, 1902, according to vouchers of this department, has been as follows:—

| | | |
|--|-------------|-------------|
| Previously reported:— | | |
| Construction and incidentals, | \$6,529 65 | |
| Engineering and inspection, | 1,066 55 | |
| | <hr/> | \$7,596 20 |
| Year ending Nov. 1, 1902:— | | |
| Construction, including royalty, | \$31,503 20 | |
| Incidentals, | 313 90 | |
| Engineering and inspection, | 2,837 45 | |
| | <hr/> | 34,654 55 |
| | | <hr/> |
| Total, | | \$42,250 75 |

The work on the bridge was resumed March 24, 1902, for the season. Some concrete was laid in foundations and

abutments in 1901, but the steel-concrete arches were built during this summer. Samples from all cement used have been tested. Arrangements have been made for carrying telephone and electric wires across in underground conduits. The city of Boston finished, in December, 1901, the 61½-foot drain outlet through the northerly abutment. The incomplete condition of the bridge caused the postponement of laying the street railway tracks until next spring.

The west roadway of the parkway, from the bridge to Brook Road, was scraped and patched with broken stone in October; further work of a similar nature will be required on this section before winter.

Construction plans have been prepared from Canton Avenue to the Harland Street Entrance.

Furnace Brook. — The high-level sewer has been constructed by the Metropolitan Water and Sewerage Board, for a distance of 2,400 feet from Adams Street down the parkway towards Newport Avenue. The surplus material from trenching has been placed on the parkway drive, thus practically making the fills to sub-grade from a point about 1,200 feet west of Newport Avenue to about 1,000 feet west of Adams Street, a total of three-quarters of a mile.

A taking plan has been made for an extension from Hancock Street to Merrymount Park, and construction plans are in progress covering the same section.

Lynnway. — Test borings across the Saugus River for the proposed bridge were made in July, 1902, at a cost of \$103.29, exclusive of engineering.

Middlesex Fells Parkway. — Plans for additional takings between Mystic Avenue, in Somerville, and the junction with the Revere Beach Parkway, in Medford, have been made in conformity with the Landscape Architects' final design for approaches to the proposed new Wellington Bridge, formerly known as the Middlesex Avenue Bridge. The plans for this bridge, with the necessary changes in harbor lines, were approved April 11, 1902, by the Harbor and Land Commissioners, and May 29, 1902, by the United States War Department. Incidental to the building of this bridge and contemplated work below it by the Boston &



REVERE BEACH PARKWAY.—SECTION IN REVERE.

Maine Railroad, the draw in the bridge will be widened to 50 feet, with the opening made at right angles, the channel of the river straightened, and the river deepened by dredging and the flats removed.

Plans and specifications having been prepared, proposals were received Aug. 4, 1902, for building the stone abutments and filling the approaches of the Wellington Bridge, from the following : —

| | |
|---|-------------|
| Jones & Meehan, Boston, | \$57,082 50 |
| Coleman Brothers, Everett, | 55,850 00 |
| Conners Brothers, Lowell, | 51,323 00 |
| Wm. L. Miller, Boston, | 45,923 00 |
| W. H. Ellis, Boston, | 44,960 00 |
| Lawler Brothers, Charlestown, | 42,780 00 |
| Wilson & Jubb, Boston, | 42,433 00 |

The latter withdrawing, the contract, No. 57, was awarded to Lawler Brothers. Work began Aug. 11, 1902, and is now in progress. The total estimated cost to Nov. 1, 1902, according to vouchers of this department, has been as follows : —

| | |
|--|-------------|
| Construction, contract No. 57, | \$14,621 55 |
| Repairs to old bridge, | 368 99 |
| Incidentals, | 139 58 |
| Engineering and inspection, | 1,109 15 |
| <hr/> | |
| Total, | \$16,239 27 |

The location of the new abutment at the Somerville end of the bridge, to conform to the new shore line, necessitated changes in the water mains crossing the river just below the old bridge. This work is being done by the Metropolitan Water and Sewerage Board.

The new Wellington Bridge is to be a substantial pile structure, with a steel retractile draw; the total length will be 950 feet and the general width 70 feet, narrowed to 60 feet on the draw. Its location will centre on the main drive of the completed parkway, or about 70 feet up stream from the centre of the old Middlesex Avenue Bridge, which it is to replace.

Brick-paved gutters were laid in November, 1901, by McCarthy & Gill, on the approaches to the bridge over the Medford Branch Railroad, Fellsway, at a cost of \$2.10 a square yard; total, \$1,136.10, exclusive of engineering. Eastern paving brick were used. The iron work on this bridge over the railroad was painted in June, 1902, at a cost of \$52.85.

Mystic Valley. — A foot-bridge, 140 feet in length and 8 feet in width, has been built across the Aberjona River, from the southerly end of Manchester Field to the Parkway. The bridge was constructed between Nov. 18, 1901, and Jan. 20, 1902, and the approaches March 26, 1902, and April 1, 1902. This work was done under contract with J. J. Flynn of Boston, and the cost has been as follows: —

| | |
|---|------------|
| Construction, under contract, | \$1,194 50 |
| Paint, | 21 00 |
| Incidentals, | 5 98 |
| Engineering and inspection, | 176 25 |
| | <hr/> |
| Total, | \$1,397 73 |

The total cost to date of grading Manchester Field, omitting labor done under direction of the Superintendent, but including, in item for engineering, cost of all services rendered by this department, has been as follows: —

Previously reported: —

| | |
|--|-------------|
| Labor, loam and incidentals, | \$11,884 44 |
| Engineering and inspection, | 734 80 |
| | <hr/> |
| | \$12,619 24 |

Year ending Nov. 1, 1902: —

| | |
|---------------------------------------|-------------|
| Filling material, | \$335 52 |
| Incidentals, | 1 90 |
| Engineering and inspection, | 37 13 |
| | <hr/> |
| | 374 55 |
| | <hr/> |
| Total, | \$12,993 79 |

Construction plans have been prepared for a foot-bridge, 42 feet in length and 5 feet in width, from the parkway, across the Aberjona River to the northerly end of Ginn Field. The abutments are now being constructed by the Superintendent of the parkway.

Nahant Beach. — Plans and estimates have been made for changes in street and for grading about a suggested bath-house.

Neponset River Parkway. — A taking plan has been made for a proposed extension from Brush Hill Road to Blue Hill Avenue.

Revere Beach Parkway. — The portions of this parkway under contract No. 54 with Coleman Brothers, and contract No. 55 with McCarthy & Gill, have been completed, the former section May 15 and the latter May 16, 1902. The work was accepted by the Commission May 21, and the parkway opened to the public May 24, 1902.

The parkway is now completed from Charles Eliot Circle, of the Revere Beach Reservation, to Main Street, Everett, except for a distance of .22 of a mile at the Revere Station. This portion is being constructed in connection with the elimination of the grade crossing of Winthrop Avenue, and the new bridge will answer for avenue and parkway, the large central girder dividing the two roads. The work is being done by the Boston & Maine Railroad, under agreement with the Commission as to approval of plans, specifications and award of contracts. The stone abutments have been constructed ready for the steel superstructure, and the approaches filled to sub-grade. The town of Revere has rebuilt a short length of wooden sewer crossing the easterly approach to this bridge.

The grade of Everett Avenue, at the crossing of the parkway in Everett and Chelsea, was raised 4 feet by the respective cities, at the expense of the parkway funds.

Propositions for fencing portions of the parkway were received Nov. 21, 1901, from six parties, aggregate varying from \$4,068 to \$1,998. Awards were made to Wm. H. Graham for the section from junction of Winthrop Avenue to Mill Street, and to Coleman Brothers for the section from Mill Street to Main Street. The final payments were: to Wm. H. Graham, \$495.85 for 2,585 lineal feet of one-rail, and 940 lineal feet of two-rail, fence; and to Coleman Brothers, \$1,738.70 for 14,716 lineal feet of one-rail fence.

The drain built by the city of Everett for the joint use of

the city and parkway, and towards the cost of construction of which the Commonwealth was to contribute, was reported on May 12, 1902, as completed.

A system of water supply for street watering has been put in by the Revere Water Company, the Chelsea Water Department and the Everett Board of Public Works. Total number of stand-pipes is 14. The edgestone setting and paving at the stand-pipes was done by our contractors.

The total cost of construction, according to vouchers of this department, has been as follows:—

| | | | |
|-------------------------------|---|---|--------------------|
| Previously reported:— | | | |
| Construction and incidentals, | . | . | \$379,215 41 |
| Engineering and inspection, | . | . | 17,049 52 |
| | | | <hr/> \$396,264 93 |
| Year ending Nov. 1, 1902:— | | | |
| Construction, | . | . | \$22,729 11 |
| Everett Avenue, | . | . | 516 59 |
| Fence and paint, | . | . | 2,423 02 |
| Stand-pipes, | . | . | 1,362 29 |
| Incidentals, | . | . | 127 99 |
| Engineering and inspection, | . | . | 2,788 25 |
| | | | <hr/> 29,947 25 |
| Total, | . | . | <hr/> \$426,212 18 |

The arrangements for lighting are as follows: Charles Eliot Circle to Mill Street, 16 arc lights, furnished and operated by the Suburban Gas and Electric Company; 2 more will be added on completion of the Revere Bridge. Mill Street, Revere, to Main Street, Everett, 95 mantle lights, furnished and operated by the Welsbach Street Lighting Company.

The main line of wires from the power house of the Suburban Gas and Electric Company in Revere have been removed from what was Vinal Street, and is now a portion of the parkway.

RESERVATIONS.

Beaver Brook.—The widening of Trapelo Road made necessary the extension of the culvert and some slight changes in the course of the brook. This work was done by the Superintendent of the reservation in November, 1901, the Concord & Boston Street Railway Company paying one-half the cost. The Superintendent has also made

some necessary repairs to dams of the two ponds. Construction plans have been made for a boundary road from Quince Street to the Fitchburg Railroad.

Blue Hills Reservation. — Construction plans have been prepared for the Harland Street Entrance, the main drive of which will be .72 of a mile long.

Charles River. — Work on the Charles River Road from North Beacon Street to Riverside Street, Watertown, was suspended Dec. 6, 1901. During the winter the plan was revised, and the location of the road from Beachwood Avenue to Irving Street was moved towards the river, becoming a reservation drive, instead of a border road. Work was resumed by the contractors, Coleman Brothers, April 7, 1902, completed July 30, 1902, and opened to the public Aug. 6, 1902. Incidental to this work, the wooded river bluff, back of which the road passes, was protected from washing by rockwork, with slopes thickly surfaced with loam and seeded. As far as practicable with the funds available, the filling material used was obtained by dredging the river.

Proposals for fencing were received July 16, 1902, from five parties, the prices ranging from 25 cents to 18 cents a lineal foot. The lowest proposition was accepted, that of Moses Whiting, and 2,750 lineal feet were built. Arrangements were made with the Watertown Water Department to furnish a supply for street watering. The drive is closed nights, no money being available for lighting.

The total cost of construction, according to vouchers of this department, has been as follows: —

Previously reported: —

| | | |
|---------------------------------------|-------------|-------------|
| Construction, | \$11,694 25 | |
| Engineering and inspection, | 427 15 | |
| | ————— | \$12,121 40 |

Year ending Nov. 1, 1902: —

| | | |
|---------------------------------------|-------------|-------------|
| Construction, | \$40,609 29 | |
| Fence and paint, | 551 31 | |
| Work on bluff, | 671 21 | |
| Stand-pipes, | 50 00 | |
| Incidentals, | 74 40 | |
| Engineering and inspection, | 1,482 98 | |
| | ————— | 43,439 19 |
| Total, | | \$55,560 59 |

Boylston Street, Newton, and Worcester Street, Wellesley, dividing the Charles River and the Hemlock Gorge Reservations, is being widened and rebuilt by the street railway company, under agreements with Newton and Wellesley. Certain supervision of this work is being done by this department.

The city of Boston has completed the construction of Brooks Street extension across the reservation from Faneuil Station to North Beacon Street.

Construction plans for a river road from Mt. Auburn Street, Cambridge, to North Beacon Street, Watertown, are in progress.

Hemlock Gorge. — Newton's sewer, through the reservation from Boylston Street to Elliot Street, has been completed, and the marks of construction satisfactorily removed. Inlets have been left for the use of the reservation. The sewer is laid partly in trench and partly in tunnel, crossing the river by an inverted siphon under Echo Bridge. The surplus material from the trenches was disposed of by the city, in straightening border road of Charles River Reservation at Dresser's Pond, and in fill for border road in Hemlock Gorge Reservation.

Lynn Shore. — Repairs have been made by the Superintendent of the reservation at the southerly end to the bulkhead, but nothing of a permanent nature has been attempted.

Mystic River. — Construction plans for roads and drives are in progress.

Nantasket Beach. — Lines and grades have been given for grading and building improvements.

Neponset River Reservation. — The high-level sewer has been constructed by the Metropolitan Water and Sewerage Board, crossing the reservation and river at Monponset Street in Hyde Park. The same Board has laid a water pipe across the river at the foot of West Street in the same town. The city of Boston, with the Commission's approval, has crossed the reservation at Central Avenue with a drain outlet.

Revere Beach Reservation. — Stakes have been set for additional tree planting between Charles Eliot Circle and

Shirley Avenue. Lines and grades have been given for the Superintendent's new house and grading of lot at Charles Eliot Circle.

Winthrop Shore. — The winter storms have several times washed this shore drive, heavy seas have struck the sea-wall, the spray being thrown high into the air, to fall back onto the promenade and drive. The promenade next to the sea-wall has been much washed, and requires a cement or brick surface to avoid renewing each year. Large quantities of sand and gravel have been at the same time washed onto the drive. This department has had sections of this beach made at irregular intervals of time since December, 1897; and the average of the eleven sections taken along this mile of beach shows a remarkable uniformity, although accumulations have occurred at certain sections, and the beach been denuded at others. This latter effect has been noticeable in the vicinity of the Sturgis Street bastion, and it is very probable that some means of protection will soon be necessary at this point.

GENERAL.

Few topographical surveys have been made during the year, and these over only small areas. During the year 205 stone bounds have been set on boundaries. Engineering and inspection incidental to actual construction and maintenance, omitting travelling and other incidental expenses, has averaged 7.58 per cent. Forty-eight duplicates of early recorded plans were made in December, 1901, and January, 1902.

The following tables are appended to this report: —

Table 1. Lengths of parkways.

Table 2. Summary of plan work.

Table 3. Summary of vouchers.

Table 4. Summary of cost of engineering.

Table 5. Prices for items of construction.

Respectfully submitted,

WM. T. PIERCE,

Engineer.

TABLE 1. — *Length of Parkways, corrected to Dec. 1, 1902.*

| DESCRIPTION. | Construc- tion completed (Miles). | Under Construc- tion (Miles). | Remainder (Miles). | Totals (Miles). |
|---|--|--|-----------------------|--------------------|
| Blue Hills: Mattapan Square to Har- land Street Entrance of Blue Hills Reservation, Boston and Milton, . | 1.47 | .08 | .73 | 2.28 |
| Fresh Pond: Mount Auburn Street to Huron Avenue, Cambridge, . | .52 | — | — | .52 |
| Furnace Brook: Merrymount Park to Blue Hills Reservation, Quincy, | — | — | 3.33 | 3.33 |
| Lynnway: Revere Beach Reserva- tion to northerly side of Saugus River, Revere and Lynn, | — | — | .69 | .69 |
| Middlesex Fells: Broadway to Mid- dlesex Fells, Somerville, Medford and Malden, | 3.67 | .28 | .65 | 4.60 |
| Mystic Valley: High Street to Mid- dlesex Fells Reservation, Medford and Winchester, | 2.90 | — | — | 2.90 |
| Nahant Beach: Lynn Line at Wash- ington Street to Spring Road, Nahant, | — | — | 2.23 | 2.23 |
| Neponset River: junction of River Street and Damon Street to Milton Street, Hyde Park and Milton, . | — | — | 1.12 | 1.12 |
| Revere Beach: Revere Beach Reser- vation to Middlesex Fells Parkway and Mystic River Reservation, Revere, Chelsea, Everett and Med- ford, | 3.95 | .22 | 1.07 | 5.24 |
| Totals, | 12.51 | .58 | 9.82 | 22.91 |

TABLE 2. — *Summary of Maps and Plans prepared during Year ending Nov. 1, 1902, omitting Blue and Other Prints.*

| | Abandonments and Conveyances. | Construction. | Copies. | Entrances. | General. | Land and Settle- ment. | Restriction. | Takings, including Conveyances to Commonwealth. | Topographical. | Working Plans (Office). | Totals. |
|--------------------------|----------------------------------|---------------|---------|------------|----------|---------------------------|--------------|---|----------------|----------------------------|---------|
| <i>Parkways.</i> | | | | | | | | | | | |
| Blue Hills, | - | 12 | - | - | 2 | - | - | - | - | - | 14 |
| Fresh Pond, | - | - | - | - | - | - | - | - | - | - | - |
| Furnace Brook, | 2 | - | 2 | - | - | 7 | - | 4 | - | 8 | 23 |
| Lynnway, | - | 1 | - | - | - | - | - | - | - | - | 1 |
| Middlesex Fells, | 1 | 19 | 1 | - | - | 4 | 6 | 9 | - | 39 | 79 |
| Mystic Valley, | 2 | 6 | - | - | - | - | - | 5 | - | 2 | 15 |
| Nahant Beach, | - | 4 | - | - | - | 3 | - | - | - | - | 7 |
| Neponset River, | - | - | - | - | - | 2 | - | 1 | - | 1 | 4 |
| Revere Beach, | 37 | 7 | 4 | 1 | 7 | 17 | 5 | 3 | - | 49 | 130 |
| West Roxbury, | - | - | - | - | - | - | - | 2 | - | - | 2 |
| Totals, | 42 | 49 | 7 | 1 | 9 | 33 | 11 | 24 | - | 99 | 275 |
| <i>Reservations.</i> | | | | | | | | | | | |
| Beaver Brook, | - | 2 | - | - | - | - | - | 2 | - | - | 4 |
| Blue Hills, | 1 | 6 | - | - | 1 | - | - | 9 | 2 | 1 | 20 |
| Charles River, | 5 | 15 | 2 | 2 | 3 | 9 | 11 | 13 | 2 | 7 | 69 |
| Hemlock Gorge, | - | - | - | - | - | - | - | 1 | - | - | 1 |
| King's Beach, | - | - | - | - | - | - | - | 2 | - | - | 2 |
| Lynn Shore, | - | - | - | 1 | - | 1 | - | - | - | - | 2 |
| Middlesex Fells, | - | - | - | 1 | - | 1 | - | 13 | 1 | - | 16 |
| Mystic River, | 2 | - | 2 | - | - | 18 | - | - | 1 | 6 | 29 |
| Nantasket Beach, | - | 3 | - | - | - | 3 | - | 2 | 3 | 3 | 14 |
| Neponset River, | 10 | - | 5 | - | - | 30 | - | 1 | - | - | 46 |
| Quincy Shore, | - | - | - | - | - | 5 | - | - | - | 2 | 7 |
| Revere Beach, | 1 | - | - | - | - | 2 | - | 13 | 2 | 2 | 20 |
| Stony Brook, | - | - | - | - | - | - | - | 5 | - | - | 5 |
| Winthrop Shore, | 5 | - | - | - | - | 2 | - | - | - | - | 7 |
| Totals, | 24 | 26 | 9 | 4 | 4 | 71 | 11 | 61 | 11 | 21 | 242 |
| Grand totals, | 66 | 75 | 16 | 5 | 13 | 104 | 22 | 85 | 11 | 120 | 517 |

Reservations.

| | | | | | | | | | | | | | |
|---------------------------|--------------|----------|---------|--------------|---------|---------|-------------|---------|----------|----------|----------|-------------|--------------|
| Beaver Brook, . . . | \$63 00 | - | - | \$63 00 | - | - | \$114 43 | - | - | - | \$2 47 | \$116 90 | \$179 90 |
| Blue Hills, . . . | - | - | - | - | - | - | 131 82 | - | - | - | 3 75 | 135 57 | 135 57 |
| Charles River, . . . | 42,041 81 | \$16 87 | - | 42,058 68 | - | - | 3,748 93 | - | \$44 45 | \$31 76 | 58 26 | 3,883 40 | 45,942 08 |
| Hemlock Gorge, . . . | - | - | - | - | - | - | 130 68 | - | - | - | 2 15 | 132 83 | 132 83 |
| King's Beach, . . . | - | - | - | - | - | - | 89 85 | - | - | - | 90 | 90 75 | 90 75 |
| Lynn Shore, . . . | - | - | - | - | - | - | 127 22 | \$0 16 | - | - | 3 30 | 130 68 | 130 68 |
| Middlesex Fells, . . . | - | - | - | - | - | - | 170 68 | - | - | - | 7 50 | 178 18 | 178 18 |
| Mystic River, . . . | - | - | - | - | - | - | 585 95 | - | - | - | 5 06 | 601 00 | 601 00 |
| Nantasket Beach, . . . | - | - | - | - | - | - | 605 62 | - | - | 95 06 | 3 90 | 704 58 | 704 58 |
| Neponset River, . . . | - | 68 94 | - | 68 94 | - | - | 974 39 | - | - | 33 50 | 4 77 | 1,012 66 | 1,081 60 |
| Quincy Shore, . . . | - | - | - | - | - | - | 158 80 | - | - | 13 50 | 47 | 172 77 | 172 77 |
| Revere Beach, . . . | - | - | - | - | - | - | 483 47 | - | - | 10 00 | 6 75 | 510 22 | 510 22 |
| Stony Brook, . . . | - | - | - | - | - | - | 32 37 | - | - | - | 1 60 | 33 97 | 33 97 |
| Wellington Bridge, . . . | 15,075 32 | - | - | 15,075 32 | - | - | 3,166 40 | - | 8 33 | 18 00 | 46 80 | 3,239 53 | 18,314 85 |
| Winthrop Shore, . . . | - | - | - | - | - | - | 290 42 | - | - | 5 00 | 1 35 | 296 77 | 2 6 77 |
| Reservation totals, . . . | \$57,180 13 | \$85 81 | - | \$57,265 94 | - | - | \$10,831 03 | \$0 16 | \$52 78 | \$206 82 | \$149 02 | \$11,239 81 | \$68,505 75 |
| Grand totals, . . . | \$119,541 20 | \$580 70 | \$38 45 | \$120,121 90 | \$21 94 | \$40 13 | \$23,244 39 | \$22 54 | \$379 26 | \$500 81 | \$340 03 | \$24,587 55 | \$144,709 45 |

TABLE 4. — Summary of Engineering and Surveying.

| | Abandonments and Conveyances. | Boundaries, Plans, Staking and Monuments. | Construction and Maintenance, Including Accidental. | Construction, Preliminary to | General. | Land and Settlements, Surveys and Plans. | Permits. | Restrictions, Surveys and Plans. | Takings. | Topographical. | Totals. |
|---------------------------------------|-------------------------------|---|---|------------------------------|----------|--|----------|----------------------------------|------------|----------------|-------------|
| <i>Parkways.</i> | | | | | | | | | | | |
| Blue Hills, | - | \$2 20 | \$2,900 95 | \$180 70 | \$1 90 | \$32 85 | \$101 05 | - | - | - | \$3,219 65 |
| Blue Hills roads, | - | - | - | 67 20 | - | - | - | - | - | - | 67 20 |
| Fresh Pond, | - | 5 00 | 22 00 | - | 2 10 | 7 20 | 3 80 | - | - | - | 40 10 |
| Furnace Brook, | \$15 78 | 16 02 | 16 60 | 41 60 | 5 00 | 210 22 | 283 24 | - | \$670 56 | \$3 00 | 1,262 02 |
| Lynnway, | - | - | - | 131 35 | 50 | - | - | - | - | - | 131 85 |
| Middlesex Fells, | 15 80 | 164 62 | 104 80 | 27 23 | 9 50 | 33 77 | 22 30 | - | 25 15 | 29 18 | 432 41 |
| Middlesex Fells roads, | - | - | 20 68 | 6 60 | 6 50 | - | - | - | - | - | 39 78 |
| Mystic Valley, | 80 54 | 28 87 | 204 20 | 169 30 | 7 30 | 28 11 | 3 80 | - | 19 85 | - | 632 06 |
| Nahant Beach, | - | 50 | - | 82 48 | - | 36 83 | - | - | - | - | 119 81 |
| Neponset River, | - | 4 57 | - | - | 50 | 22 37 | 4 50 | - | 347 45 | - | 379 39 |
| Revere Beach, | 581 32 | 719 94 | 2,788 25 | 268 95 | 43 60 | 587 91 | 170 45 | 30 21 | 117 25 | - | 5,316 88 |
| Speedway (Charles River Reservation). | - | 3 20 | 21 23 | - | 33 40 | 20 35 | - | - | - | - | 78 18 |
| Parkway totals | \$693 44 | \$944 92 | \$6,174 80 | \$975 50 | \$112 30 | \$979 61 | \$589 14 | \$36 21 | \$1,180 26 | \$42 18 | \$11,718 36 |

| | | | | | | | | | | |
|---|------------|------------|------------|------------|------------|------------|----------|------------|----------|-------------|
| Beaver Brook, | \$1 40 | \$51 23 | \$51 60 | \$2 00 | \$611 30 | \$233 88 | \$26 20 | \$6 80 | \$1 40 | \$114 43 |
| Blue Hills, | 1 70 | - | - | 7 00 | - | - | - | 47 27 | 57 85 | 131 82 |
| Charles River, | 188 28 | 1,408 48 | 583 25 | 116 60 | \$611 30 | \$233 88 | \$26 20 | 113 49 | 151 73 | 3,748 93 |
| Hemlock Gorge, | 16 15 | - | 30 63 | 26 18 | - | 52 50 | - | 5 22 | - | 130 08 |
| King's Beach, | 50 | 3 00 | - | - | - | 78 90 | - | 7 45 | - | 89 85 |
| Lynn Shore, | 50 | 22 50 | 43 30 | - | 16 40 | 44 52 | - | - | - | 127 22 |
| Middlesex Fells, | 33 57 | 3 00 | - | 14 40 | 32 80 | - | - | 57 31 | 25 40 | 170 68 |
| Mystic River, | 29 60 | - | 136 02 | 5 50 | 354 91 | 15 00 | - | 5 00 | 24 72 | 595 95 |
| Nantasket Beach, | 50 | 131 87 | 105 05 | 9 90 | 31 90 | - | - | 102 15 | 164 25 | 605 62 |
| Neponset River, | 42 55 | 1 50 | - | 21 35 | 552 15 | 118 27 | - | 1 96 | 4 30 | 974 39 |
| Quincy Shore, | 50 | - | 50 78 | - | 107 52 | - | - | - | - | 158 80 |
| Revere Beach, | 51 75 | 29 38 | 18 40 | 12 70 | 25 00 | 86 56 | - | 125 07 | 128 51 | 493 47 |
| Stony Brook, | - | 4 50 | - | 9 40 | - | - | - | 18 47 | - | 32 37 |
| Wellington Bridge (Middlesex Fells Parkway). | - | 1,109 15 | 1,819 72 | - | 49 00 | - | 57 53 | 131 00 | - | 3,166 40 |
| Winthrop Shore, | 10 70 | 27 10 | - | 77 02 | 55 30 | 62 30 | - | - | - | 290 42 |
| Reservation totals, | \$377 70 | \$2,891 71 | \$2,909 35 | \$302 05 | \$1,836 28 | \$691 93 | \$83 73 | \$621 18 | \$558 16 | \$10,831 03 |
| Miscellaneous, | - | - | - | 695 00 | - | - | - | - | - | 695 00 |
| Grand totals, | \$1,322 62 | \$9,066 51 | \$3,884 85 | \$1,109 35 | \$2,815 89 | \$1,281 07 | \$119 94 | \$1,801 44 | \$590 34 | \$22,244 39 |

TABLE 5. — *Prices paid for Principal Items of Construction.*

| CONTRACT No., | PARKWAYS. | | | | RESER- VATION, CHARLES RIVER. |
|--|----------------|----------------|--------------|--------------------------|--|
| | BLUE HILLS. | REVERE BEACH. | | MIDDLE- SEX FELLS. | |
| | 53. | 54. | 55. | 57. | 56-A. |
| <i>Ballast.</i> | | | | | |
| Gravel ballast (cubic yard), | - | - | - | \$1 00 | - |
| Stone ballast (ton, 2,000 pounds), . . | - | - | - | 1 00 | - |
| <i>Drains.</i> | | | | | |
| 8-inch vitrified pipe (lineal foot), . . | - | \$0 40 | \$0 19 | - | - |
| 10-inch vitrified pipe (lineal foot), . . | \$0 50 | 40 | 27 | - | \$0 40 |
| 12-inch vitrified pipe (lineal foot), . . | - | 50 | 32 | - | 50 |
| 15-inch vitrified pipe (lineal foot), . . | - | 75 | 50 | - | 75 |
| 18-inch vitrified pipe (lineal foot), . . | - | 90 | 65 | - | 1 00 |
| 20-inch vitrified pipe (lineal foot), . . | - | 1 00 | - | - | 1 00 |
| 30-inch vitrified pipe (lineal foot), . . | - | - | - | - | 3 00 |
| 6-inch vitrified pipe underdrain (lineal foot), | - | 45 | - | - | - |
| <i>Edgestone.</i> | | | | | |
| Furnishing and setting (lineal foot), . . | 1 00 | 1 15 | { 75 1 25 | - | - |
| <i>Fences.</i> | | | | | |
| Wooden, two rail (lineal foot), | - | - | 17 | - | - |
| Wooden, one rail (lineal foot), | - | 12 | 13 | - | - |
| <i>Grading.</i> | | | | | |
| Earth excavation (cubic yard), | 80 | 19 | 23 | 40 | 30 |
| Wet excavation or dredging (cubic yard), . | - | - | - | 45 | 50 |
| Earth filling, furnished (cubic yard), . . | - | 49 | 52 | - | - |
| Rock excavation (cubic yard), | 1 75 | { 1 75 3 50 | 1 75 | - | - |
| <i>Gutters.</i> | | | | | |
| Vitrified brick-paved (square yard), . . | - | 2 00 | 1 70 | - | - |
| <i>Lumber.</i> | | | | | |
| Spruce lumber, in place (1,000 feet B. M.), | - | - | - | 38 00 | - |
| <i>Masonry.</i> | | | | | |
| Brick (cubic yard), | 14 00 | 13 00 | 11 00 | - | 13 00 |
| First-class stone (cubic yard), | 40 00 | - | - | 27 00 | - |
| Second-class stone, dry (cubic yard), . . | - | - | - | 6 50 | - |
| Rubble, dry and pointed (cubic yard), . . | - | 3 50 | - | - | 6 00 |
| Rubble, in mortar (cubic yard), | 6 00 | - | - | - | - |
| Concrete, Portland cement (cubic yard), . | 7 00 | - | - | - | - |
| <i>Piles.</i> | | | | | |
| Spruce piles, length 26 to 30 feet inclusive, each, | - | - | - | 3 50 | - |
| Spruce piles, length 31 to 35 feet inclusive, each, | - | - | - | 4 00 | - |
| Spruce piles, length 36 to 40 feet inclusive, each, | - | - | - | 4 50 | - |
| <i>Surfacing.</i> | | | | | |
| Broken stone, roadway (square yard), . . | 30 | 45 | 45 | - | - |
| Gravel, roadway (square yard), | - | - | 33 | - | 28 |
| Gravel, walk (square yard), | 20 | 21 | 21 | - | - |
| Loam (cubic yard), | - | 36 | 30 | - | 30 |
| Loam, including furnishing (cubic yard), . | 1 00 | 1 01 | 87 | - | 90 |

FINANCIAL STATEMENT.

DEC. 1, 1901, TO DEC. 1, 1902.

| | |
|--|-----------------------|
| Metropolitan Parks Loan, | \$6,855,000 00 |
| Receipts from bath-house, sales, etc., | 198,334 01 |
| | <u>\$7,053,334 01</u> |

Expenditures.

General expense:—

Engineering:—

Pay rolls, . . . \$600 00

Expenses, . . . 384 78

\$984 78

Landscape Architects, ex-
penses,

2 35

Legal,

1,631 39

Claims,

1,081 92

Miscellaneous,

7 10

\$3,707 54

Blue Hills Reservation:—

Engineering:—

Pay rolls, . . . \$104 15

Expenses, . . . 1 15

\$105 30

Landscape Architects:—

Services, . . . \$300 00

Expenses, . . . 205 79

505 79

Legal,

12 50

623 59

Middlesex Fells Reservation:—

Land, \$3,382 45

Engineering pay rolls, . . . 113 37

Landscape Architects:—

Services, . . . \$350 00

Expenses, . . . 339 50

689 50

Legal,

27 81

4,213 13

Amounts carried forward, \$8,544 26 \$7,053,334 01

Amounts brought forward, . . . \$8,544 26 \$7,053,334 01

Revere Beach Reservation: —

Land, \$50 00

Court experts and expenses, 183 00

Engineering: —

Pay rolls, . . \$445 75

Expenses, . . 15 75

461 50

Landscape Architects: —

Services, . . \$50 00

Expenses, . . 110 11

160 11

Legal, 352 34

Sketch Charles Eliot Me-

morial, 50 00

1,256 95

Stony Brook Reservation: —

Court experts and expenses, \$20 00

Engineering: —

Pay rolls, . . \$13 90

Expenses, . . 10

14 00

Landscape Architects: —

Services, . . \$175 00

Expenses, . . 91 83

266 83

300 83

Beaver Brook Reservation: —

Engineering: —

Pay rolls, . . \$107 63

Expenses, . . 1 97

\$109 60

Landscape Architects: —

Services, . . \$25 00

Expenses, . . 53 52

78 52

Stone for culvert, . . 63 00

251 12

Hemlock Gorge Reservation: —

Engineering: —

Pay rolls, \$125 46

Expenses, 1 65

127 11

Amounts carried forward, . . . \$10,480 27 \$7,053,334 01

Amounts brought forward, . . . \$10,480 27 \$7,053,334 01

Charles River Reservation:—

Land, . . . \$102,145 52

Construction:—

Charles River

Road con-

tract, . \$41,862 51

Labor and ma-

terial, . 1,924 54

43,787 05

Court experts and expenses, 7,064 99

Engineering:—

Pay rolls, . \$3,655 87

Expenses, . 139 05

3,794 92

Landscape Architects:—

Services, . \$300 00

Expenses, . 697 32

997 32

Legal, . . 1,450 39

Appraisals, . . 874 00

Miscellaneous, . . 60 90

160,175 09

Neponset River Reservation:—

Land, . . \$41,989 47

Court experts and expenses, 7,588 73

Engineering:—

Pay rolls, . \$782 94

Expenses, . 24 77

807 71

Legal, . . 583 46

Claims, . . 49 38

Appraisals, . . 25 00

Miscellaneous, . . 78 94

51,122 69

Mystic River Reservation:—

Land, . . \$48,383 93

Court experts and expenses, 1,123 40

Engineering:—

Pay rolls, . \$595 95

Expenses, . 5 05

601 00

Landscape Architects:—

Services, . \$50 00

Expenses, . 61 76

111 76

Am'ts carried forward, . \$50,220 09 \$221,778 05 \$7,053,334 01

| | | | |
|----------------------------------|-------------|--------------|----------------|
| <i>Am'ts brought forward, .</i> | \$50,220 09 | \$221,778 05 | \$7,053,334 01 |
| Legal, | 615 35 | | |
| Claims, | 51 80 | | |
| Appraisals, | 25 00 | | |
| Miscellaneous, | 14 00 | | |
| | <hr/> | 50,926 24 | |
| Lynn Shore Reservation:— | | | |
| Land, | \$8,407 50 | | |
| Engineering:— | | | |
| Pay rolls, | \$127 22 | | |
| Expenses, | 3 46 | | |
| | <hr/> | 130 68 | |
| Legal, | 17 64 | | |
| | <hr/> | 8,555 82 | |
| Quincy Shore Reservation:— | | | |
| Land, | \$4,750 00 | | |
| Court experts and expenses, | 125 00 | | |
| Engineering:— | | | |
| Pay rolls, | \$158 80 | | |
| Expenses, | 13 97 | | |
| | <hr/> | 172 77 | |
| Landscape Architects, ser- | | | |
| vices, | 25 00 | | |
| Legal, | 386 23 | | |
| Appraisals, | 15 00 | | |
| | <hr/> | 5,474 00 | |
| Winthrop Shore Reservation:— | | | |
| Land, | \$339 00 | | |
| Engineering:— | | | |
| Pay rolls, | \$290 42 | | |
| Expenses, | 6 35 | | |
| | <hr/> | 296 77 | |
| Legal, | 248 74 | | |
| | <hr/> | 884 51 | |
| King's Beach Reservation:— | | | |
| Engineering:— | | | |
| Pay rolls, | \$82 40 | | |
| Expenses, | 90 | | |
| | <hr/> | 83 30 | |
| Wellington Bridge:— | | | |
| Construction contract, | \$12,428 31 | | |
| <i>Am'ts carried forward, .</i> | \$12,428 31 | \$287,701 92 | \$7,053,334 01 |

Am'ts brought forward, . \$12,428 31 \$287,701 92 \$7,053,334 01

Engineering: —

Pay rolls, . . \$2,963 18

Expenses, . . 157 51

3,120 69

Bridge repairs, . . . 446 93

Drawtender's services, . . 360 00

Drawtender's house, etc., . 219 25

Drain outlet, . . . 41 83

Advertising, . . . 136 35

Miscellaneous, . . . 43 73

16,797 09

\$304,499 01

Amounts charged to Dec. 1, 1901, . . 6,424,760 88

6,729,259 89

Balance in hands of State Treasurer, . . . \$324,074 12

Metropolitan Parks Loan, Series II., . . . \$3,475,000 00

Receipts from sales, etc., . . . 29,907 41

\$3,504,907 41

Expenditures.

General expense: —

Engineering: —

Pay rolls, . . \$60 00

Expenses, . . 82 32

\$142 32

Landscape Architects, ex-

penses, . . . 20 25

Legal, . . . 3,048 87

Claims, . . . 510 00

\$3,721 44

Blue Hills Parkway: —

Land, . . . \$600 00

Construction: —

Mattapan

bridge con-

tract, . . \$25,927 72

Melan Arch

Construction

Company,

royalty, . . 1,000 00

Labor and ma-

terials, . . 204 72

27,132 44

Am'ts carried forward, . \$27,732 44 \$3,721 44 \$3,504,907 41

| | | | |
|---|-------------|-------------|----------------|
| <i>Am'ts brought forward, .</i> | \$27,732 44 | \$3,721 44 | \$3,504,907 41 |
| Engineering:— | | | |
| Pay rolls, . . . \$3,219 65 | | | |
| Expenses, . . . 178 34 | | | |
| | 3,397 99 | | |
| Landscape Architects:— | | | |
| Services, . . . \$25 00 | | | |
| Expenses, . . . 29 42 | | | |
| | 54 42 | | |
| Legal, 6 15 | | | |
| Miscellaneous, 18 97 | | | |
| | | 31,209 97 | |
| Middlesex Fells Parkway:— | | | |
| Land, \$4,214 35 | | | |
| Court experts and expenses, 507 50 | | | |
| Engineering:— | | | |
| Pay rolls, . . . \$652 96 | | | |
| Expenses, . . . 2 95 | | | |
| | 655 91 | | |
| Landscape Architects:— | | | |
| Services, . . . \$125 00 | | | |
| Expenses, . . . 83 46 | | | |
| | 208 46 | | |
| Legal, 564 65 | | | |
| Appraisals, 390 00 | | | |
| | | 6,540 87 | |
| Mystic Valley Parkway:— | | | |
| Land, \$26,025 00 | | | |
| Court experts and expenses, 50 00 | | | |
| Construction:— | | | |
| Manchester Field:— | | | |
| Contract, . . \$1,100 00 | | | |
| Labor and ma- | | | |
| terials, . . . 625 62 | | | |
| Ginn Field, labor | | | |
| and materials, 1,600 18 | | | |
| | 3,325 80 | | |
| Engineering:— | | | |
| Pay rolls, . . . \$608 04 | | | |
| Expenses, . . . 34 33 | | | |
| | 642 37 | | |
| Landscape Architects, ser- | | | |
| vices, 25 00 | | | |
| Legal, 139 45 | | | |
| | | 30,207 62 | |
| <i>Amounts carried forward,</i> | | \$71,679 90 | \$3,504,907 41 |

| | | | |
|---|--------------|--------------|----------------|
| <i>Amounts brought forward,</i> | | \$71,679 90 | \$3,504,907 41 |
| Revere Beach Parkway:— | | | |
| Land, | \$161,485 95 | | |
| Court experts and expenses, | 1,659 10 | | |
| Construction:— | | | |
| Contracts, | \$37,217 52 | | |
| Labor and materials, | 3,234 65 | | |
| | | 40,662 27 | |
| Engineering:— | | | |
| Pay rolls, | \$5,165 12 | | |
| Expenses, | 470 74 | | |
| | | 5,635 86 | |
| Landscape Architects:— | | | |
| Services, | \$50 00 | | |
| Expenses, | 193 83 | | |
| | | 243 83 | |
| Legal, | | 724 86 | |
| Appraisals, | | 115 00 | |
| City of Everett:— | | | |
| Drainage construction, \$4,333 33 | | | |
| Changes of grade, Everett Avenue, | 2,209 00 | | |
| | | 6,542 33 | |
| Bound stones and fences, | | 2,729 44 | |
| Town of Revere, contribution to cost of sewer, | | 250 00 | |
| City of Chelsea, change of grade, Everett Avenue, | | 516 59 | |
| Miscellaneous, | | 45 65 | |
| | | | 220,610 88 |
| Neponset River Parkway:— | | | |
| Land, | \$5,250 00 | | |
| Court experts and expenses, | 150 00 | | |
| Engineering:— | | | |
| Pay rolls, | \$379 39 | | |
| Expenses, | 4 35 | | |
| | | 383 74 | |
| Landscape Architects, expenses, | | | |
| | | 7 85 | |
| Legal, | | 20 29 | |
| | | | 5,811 88 |
| Fresh Pond Parkway:— | | | |
| Land, | \$7,233 04 | | |
| Court experts and expenses, | 156 30 | | |
| | | | |
| <i>Am'ts carried forward, .</i> | \$7,389 34 | \$298,102 66 | \$3,504,907 41 |

Am'ts brought forward,. \$7,389 34 \$298,102 66 \$3,504,907 41

Engineering:—

Pay rolls, . . . \$40 10

Expenses, . . . 1 00

41 10

Landscape Architects:—

Services, . . . \$50 00

Expenses, . . . 35 91

85 91

Legal, 10 25

7,526 60

Furnace Brook Parkway:—

Land, \$45,908 34

Court experts and expenses, 500 00

Construction, labor and materials, 385 74

Engineering:—

Pay rolls, . . . \$1,262 02

Expenses, . . . 31 63

1,293 65

Landscape Architects:—

Services, . . . \$15 00

Expenses, . . . 20 21

35 21

Legal, 588 46

Appraisals, 775 00

49,486 40

Nahant Beach Parkway:—

Court experts and expenses, \$478 90

Engineering, pay rolls, . . . 119 81

Landscape Architects:—

Services, . . . \$200 00

Expenses, . . . 43 36

243 36

Legal, 30 55

Plans, bath-house, . . . 400 00

1,272 62

Charles River Speedway:—

Engineering:—

Pay rolls, \$78 18

Expenses, 65

78 83

Blue Hills Roads:—

Engineering, pay rolls, 67 20

Amounts carried forward, \$356,534 31 \$3,504,907 41

Amounts brought forward, . . . \$356,534 31 \$3,504,907 41

Middlesex Fells Roads:—

Engineering:—

Pay rolls, . . \$39 78

Expenses, . . 15

\$39 93

Miscellaneous, . . . 1 76

41 69

Lynnway:—

Engineering:—

Pay rolls, . . \$131 85

Expenses, . . 104 34

\$236 19

Advertising, . . . 12 68

248 87

\$356,824 87

Amount charged to Dec. 1, 1901, . . . 2,848,328,06

3,205,152 93

Balance in hands of State Treasurer, . . . \$299,754 48

Nantasket Beach Loan, \$700,000 00

Receipts from rents, etc., 5,881 50

\$705,881 50

Land, \$24,860 00

Construction, labor and materials, 65 23

Engineering:—

Pay rolls, . . \$605 62

Expenses, . . 98 96

704 58

Landscape Architects:—

Services, . . \$675 00

Expenses, . . 430 37

1,105 37

Legal, 278 75

Bath-house, 21,852 04

Boiler and laundry house, 6,811 31

Boilers and boiler plant, 6,373 30

Laundry plant, 4,000 00

Alterations and improvements in buildings, 5,833 98

Architects, 1,651 79

Am'ts carried forward, . . . \$73,536 35

\$705,881 50

| | | |
|---------------------------------------|-------------|--------------|
| <i>Am'ts brought forward, .</i> | \$73,536 35 | \$705,881 50 |
| Mechanical engineers, . . . | 772 30 | |
| Engine and heater, . . . | 496 20 | |
| Miscellaneous, . . . | 61 81 | |
| | <hr/> | \$74,866 66 |
| Amount charged to Dec. 1, 1901, . . . | 624,495 12 | |
| | <hr/> | 699,361 78 |
| | | <hr/> |
| | | \$6,519 72 |
| | | <hr/> |

METROPOLITAN PARKS SYSTEM MAINTENANCE.

Appropriation for 1902, \$132,343 00

Expenditures.

General expense:—

| | | |
|--|------------|-------------|
| Salaries, | \$9,350 00 | |
| Rent, | 2,749 48 | |
| Stationery, | 1,066 73 | |
| Travelling expenses, . . . | 467 79 | |
| Telephones, | 451 99 | |
| Office expenses, | 370 48 | |
| Maps and books, | 247 62 | |
| Typewriters, cabinet and chair, | 197 52 | |
| Photographs, | 110 35 | |
| Police, | 82 75 | |
| Awnings, | 64 25 | |
| Towel supply, | 28 25 | |
| Press stand, | 8 00 | |
| Clock, | 7 00 | |
| Miscellaneous, | 44 50 | |
| | <hr/> | \$15,246 71 |

Blue Hills Reservation:—

| | | |
|---------------------------------|-------------|-----------------------------|
| Labor, | \$7,412 86 | |
| Police, | 6,306 71 | |
| Forestry, | 5,175 00 | |
| Repairs, Hillside Street, . . | 1,704 01 | |
| General supplies, | 626 61 | |
| Keep of horses, | 2,665 08 | |
| Horses, carriages, etc., . . | 1,472 57 | |
| Repairs to buildings, . . . | 320 70 | |
| Fencing, | 279 65 | |
| Telephones, | 192 84 | |
| Lighting, | 61 93 | |
| Watering, | 54 03 | |
| | <hr/> | |
| <i>Am'ts carried forward, .</i> | \$26,271 99 | \$15,246 71 \$132,343 00 |

| | | | |
|---------------------------------|-------------|-------------|--------------|
| <i>Am'ts brought forward, .</i> | \$26,271 99 | \$15,246 71 | \$132,343 00 |
| Water rates, | 81 70 | | |
| Safe, | 37 50 | | |
| Travelling expenses, . . | 27 63 | | |
| Life preservers, | 8 90 | | |
| Miscellaneous, | 25 55 | | |
| | <hr/> | 26,453 27 | |

Middlesex Fells Reservation : —

| | | | |
|----------------------------|------------|-----------|--|
| Labor, | \$9,568 92 | | |
| Police, | 5,436 99 | | |
| Repairs of roads, | 4,985 45 | | |
| Forestry, | 1,030 30 | | |
| Sheepfold, | 1,133 75 | | |
| General supplies, | 2,314 23 | | |
| Keep of horses, | 972 92 | | |
| Horses, carriages, etc., . | 823 92 | | |
| Lighting, | 429 96 | | |
| Repairs, | 238 42 | | |
| Telephones, | 168 28 | | |
| Travelling expenses, . . | 91 08 | | |
| Shed for steam roller, . . | 74 75 | | |
| Express, | 56 39 | | |
| Geese, | 39 00 | | |
| Safe, | 37 50 | | |
| Photographic supplies, . . | 36 19 | | |
| Fertilizer, | 18 00 | | |
| Miscellaneous, | 17 74 | | |
| | <hr/> | 27,473 79 | |

Revere Beach Reservation : —

| | | | |
|----------------------------|------------|--|--|
| Labor, | \$4,656 32 | | |
| Police, | 12,733 34 | | |
| Lighting, | 1,833 88 | | |
| Watering, | 632 70 | | |
| General supplies, | 1,643 15 | | |
| Keep of horses, | 714 19 | | |
| Horses, carriages, etc., . | 316 43 | | |
| Telephones, | 283 21 | | |
| Electrical work, | 157 48 | | |
| Settees, | 100 00 | | |
| Repairs, | 80 34 | | |
| Rubbish barrels, | 79 80 | | |
| Canvas covers, | 51 50 | | |
| Fountain, | 51 00 | | |
| Travelling expenses, . . | 37 20 | | |

| | | | |
|---------------------------------|-------------|-------------|--------------|
| <i>Am'ts carried forward, .</i> | \$23,370 54 | \$69,173 77 | \$132,343 00 |
|---------------------------------|-------------|-------------|--------------|

| | | | |
|---|-------------|--------------|--------------|
| <i>Am'ts brought forward, .</i> | \$23,370 54 | \$69,173 77 | \$132,343 00 |
| Use of steam roller, . . . | 22 50 | | |
| Derrick, | 28 00 | | |
| Water rates, | 23 00 | | |
| Miscellaneous, | 121 31 | | |
| | <hr/> | 23,565 35 | |
| Stony Brook Reservation :— | | | |
| Labor, | \$2,306 10 | | |
| Police, | 1,322 42 | | |
| Forestry, | 278 90 | | |
| General supplies, | 47 53 | | |
| Keep of horses, | 277 01 | | |
| Horses, carriages, etc., | 79 00 | | |
| Telephones, | 51 98 | | |
| Water rates, | 17 00 | | |
| Loam, | 16 80 | | |
| Repairs, | 9 25 | | |
| | <hr/> | 4,405 99 | |
| Beaver Brook Reservation :— | | | |
| Labor, | \$1,390 12 | | |
| Police, | 67 03 | | |
| Forestry, | 150 00 | | |
| General supplies, | 167 73 | | |
| Keep of horses, | 220 11 | | |
| Repairs, | 89 79 | | |
| Telephones, | 60 40 | | |
| Horses, carriages, etc., | 25 56 | | |
| Gravel, | 12 00 | | |
| Stove, | 10 60 | | |
| Rent of sewer, | 9 08 | | |
| Geese and ducks, | 9 00 | | |
| Miscellaneous, | 31 05 | | |
| | <hr/> | 2,242 47 | |
| Hemlock Gorge Reservation :— | | | |
| Labor, | \$717 10 | | |
| Police, | 954 95 | | |
| Forestry, | 124 60 | | |
| General supplies, | 59 92 | | |
| Reservoir Pond outlet, | 139 13 | | |
| Repairs, | 27 98 | | |
| Water rates, | 20 00 | | |
| Window screens, | 15 50 | | |
| Miscellaneous, | 2 00 | | |
| | <hr/> | 2,061 18 | |
| <i>Amounts carried forward,</i> | | \$101,448 76 | \$132,343 00 |

Amounts brought forward, . . . \$101,448 76 \$132,343 00

Charles River Reservation, Riverside

Section : —

| | | |
|---------------------------------|------------|----------|
| Labor, | \$1,342 87 | |
| Police, | 3,488 18 | |
| Forestry, | 387 60 | |
| General supplies, | 319 76 | |
| Boat, oars, etc., | 127 48 | |
| Telephones, | 64 94 | |
| Emergency supplies, | 61 65 | |
| Travelling expenses, | 51 54 | |
| Repairs, | 40 47 | |
| Safe, | 37 50 | |
| Bicycle, | 35 00 | |
| Whistle for launch, | 22 34 | |
| Launch cushions, | 19 50 | |
| Photograph materials, | 16 75 | |
| Lighting, | 15 00 | |
| Pennants and poles, | 13 50 | |
| Water rates, | 11 95 | |
| Storage of launch, | 10 00 | |
| Duck suits, | 10 00 | |
| Window screens, | 6 80 | |
| Miscellaneous, | 18 28 | |
| | | 6,101 11 |

Charles River Reservation, Speedway

Section : —

| | | |
|---|-------------|---------------------------|
| Labor, | \$6,021 22 | |
| Police, | 4,659 41 | |
| General supplies, | 1,018 31 | |
| Watering, | 1,537 60 | |
| Lighting, | 25 60 | |
| Loam and gravel, | 995 30 | |
| Horses, carriages, etc., | 699 57 | |
| Keep of horses, | 474 18 | |
| Repairs, Walker-Pratt property, | 409 53 | |
| Tripod stands, | 168 00 | |
| Fencing, | 90 78 | |
| Signs, | 72 78 | |
| Telephones, | 62 14 | |
| Repairs, | 56 04 | |
| Water rates, | 42 00 | |
| Safe, | 37 50 | |
| Concreting, | 30 30 | |
| | | |
| <i>Am'ts carried forward,</i> | \$16,400 26 | \$107,549 87 \$132,343 00 |

| | | | |
|---------------------------------|-------------|--------------|--------------|
| <i>Am'ts brought forward, .</i> | \$16,400 26 | \$107,549 87 | \$132,343 00 |
| Travelling expenses, | 21 40 | | |
| Flag, | 6 50 | | |
| Drop-light, | 5 31 | | |
| Miscellaneous, | 125 90 | | |
| | <hr/> | 16,559 37 | |

Neponset River Reservation:—

| | | | |
|---------------------|----------|----------|--|
| Labor, | \$392 60 | | |
| Police, | 387 50 | | |
| Forestry, | 506 50 | | |
| Fencing, | 191 25 | | |
| | <hr/> | 1,477 85 | |

Mystic River Reservation:—

| | | | |
|-------------------------------|----------|--------|--|
| Labor, | \$337 97 | | |
| Police, | 9 00 | | |
| Repairs, | 61 77 | | |
| General supplies, | 26 81 | | |
| Cleaning cesspools, | 15 00 | | |
| | <hr/> | 450 55 | |

Lynn Shore Reservation:—

| | | | |
|---|----------|--------|--|
| Labor, | \$251 00 | | |
| Police, | 557 50 | | |
| Repairing embankment and wall, | 72 00 | | |
| Telephones, | 2 20 | | |
| Travelling expenses, | 2 20 | | |
| | <hr/> | 884 90 | |

Quincy Shore Reservation:—

| | | | |
|------------------|----------|--------|--|
| Labor, | \$146 15 | | |
| | <hr/> | 146 15 | |

Winthrop Shore Reservation:—

| | | | |
|---------------------------------|------------|--|--|
| Labor, | \$1,455 55 | | |
| Police, | 963 20 | | |
| Watering, | 773 61 | | |
| Lighting, | 490 00 | | |
| General supplies, | 222 57 | | |
| Tool house, | 591 06 | | |
| Granolithic sidewalk, | 170 00 | | |
| Use of steam roller, | 90 00 | | |
| | <hr/> | | |

| | | | |
|---------------------------------|------------|--------------|--------------|
| <i>Am'ts carried forward, .</i> | \$4,755 99 | \$127,068 69 | \$132,343 00 |
|---------------------------------|------------|--------------|--------------|

| | | | |
|--------------------------------|------------|--------------|----------------------|
| <i>Am'ts brought forward,.</i> | \$1,755 99 | \$127,063 69 | \$132,313 00 |
| Repairing gutters, . . . | 49 32 | | |
| Telephones, | 31 27 | | |
| Pointing sea wall, . . . | 26 00 | | |
| Life preservers, | 20 82 | | |
| Gravel, | 16 80 | | |
| Miscellaneous, | 50 | | |
| | <hr/> | 4,900 70 | |
| | | <hr/> | 131,969 39 |
| Balance, | | | <hr/> <hr/> \$373 61 |

METROPOLITAN PARKS BOULEVARD MAINTENANCE.

| | |
|-----------------------------------|-------------|
| Appropriation for 1902, | \$80,313 00 |
|-----------------------------------|-------------|

Expenditures.

General expense:—

| | | |
|---|------------|-------------|
| Salaries, | \$7,500 67 | |
| Rent, | 2,752 97 | |
| Stationery and printing, . . | 598 48 | |
| Telephones, | 494 36 | |
| Office expenses, | 399 94 | |
| Police, | 364 99 | |
| Maps and books, | 330 62 | |
| Travelling expenses, . . . | 268 18 | |
| Filing cabinets, book cases and index, | 252 70 | |
| Photographs, | 102 18 | |
| Advertising rules, | 48 10 | |
| Clock, | 40 00 | |
| Letter press, | 35 00 | |
| Towel supply, | 23 20 | |
| | <hr/> | \$13,211 39 |

Blue Hills Parkway:—

| | | |
|------------------------------|------------|----------|
| Labor, | \$1,894 17 | |
| Police, | 3,439 36 | |
| Watering, | 1,677 92 | |
| Lighting, | 2,430 00 | |
| General supplies, | 44 16 | |
| Horses, carriages, etc., . . | 405 15 | |
| Telephones, | 81 00 | |
| Miscellaneous, | 3 50 | |
| | <hr/> | 9,975 26 |

| | | |
|---|-------------|-------------|
| <i>Amounts carried forward,</i> | \$23,186 65 | \$80,313 00 |
|---|-------------|-------------|

Amounts brought forward, . . . \$23,186 65 \$80,313 00

Middlesex Fells Parkway:—

| | | |
|------------------------------|------------|-----------|
| Labor, | \$6,425 84 | |
| Police, | 4,857 81 | |
| Repairs of roads, | 268 25 | |
| Watering, | 1,518 71 | |
| Lighting, | 6,030 00 | |
| General supplies, | 1,560 47 | |
| Edgestones and gutters, . . | 1,553 49 | |
| Horses, carriages, etc., . . | 520 72 | |
| Rock for crusher, | 408 78 | |
| Telephones, | 95 30 | |
| Catch-basin, | 66 03 | |
| Fencing, | 54 32 | |
| Painting bridge, | 52 85 | |
| Cinders, | 42 50 | |
| Repairs, | 33 87 | |
| Scales, | 30 10 | |
| Snow shoes, | 18 75 | |
| Travelling expenses, | 10 09 | |
| Stove, | 5 95 | |
| Miscellaneous, | 34 55 | |
| | | 23,588 38 |

Mystic Valley Parkway:—

| | | |
|------------------------------|------------|-----------|
| Labor, | \$3,559 51 | |
| Police, | 2,402 49 | |
| Repairs of roads, | 2,342 37 | |
| Watering, | 775 78 | |
| Lighting, | 2,580 00 | |
| General supplies, | 214 07 | |
| Edgestones, etc., | 2,736 44 | |
| Horses, carriages, etc., . . | 119 85 | |
| Telephones, | 90 10 | |
| Keep of horses, | 41 65 | |
| Repairs, | 41 31 | |
| Fence, | 39 00 | |
| Cinders, | 37 50 | |
| Granite, | 8 00 | |
| Miscellaneous, | 6 00 | |
| | | 14,994 07 |

Revere Beach Parkway:—

| | |
|---------------------|------------|
| Labor, | \$2,459 45 |
| Police, | 3,333 55 |
| Watering, | 3,988 39 |
| Lighting, | 2,841 45 |

Am'ts carried forward, . \$12,622 84 \$61,769 10 \$80,313 00

| | | | |
|---------------------------------|-------------|-------------|-------------|
| <i>Am'ts brought forward, .</i> | \$12,622 84 | \$61,769 10 | \$80,313 00 |
| Repairs of roads, . . . | 586 12 | | |
| General supplies, . . . | 350 52 | | |
| Horses, carriages, etc., . | 891 32 | | |
| Telephones, | 133 87 | | |
| Keep of horses, | 127 20 | | |
| Filling cellar, | 100 00 | | |
| Street cleaners, | 58 50 | | |
| Three poles, | 33 75 | | |
| Repairs, | 6 05 | | |
| Express, | 2 25 | | |
| | <hr/> | 14,912 42 | |

Neponset River Parkway:—

| | | | |
|----------------|--------|------|--|
| Labor, | \$3 50 | | |
| | <hr/> | 3 50 | |

Nahant Beach Parkway:—

| | | | |
|-------------------------|----------|----------|--|
| Labor, | \$750 08 | | |
| Police, | 805 05 | | |
| General supplies, . . . | 115 35 | | |
| Telephones, | 93 50 | | |
| Travelling, | 14 60 | | |
| Miscellaneous, | 4 85 | | |
| | <hr/> | 1,783 43 | |

Fresh Pond Parkway:—

| | | | |
|-------------------------|----------|----------|--|
| Labor, | \$117 00 | | |
| Police, | 986 92 | | |
| Watering, | 111 81 | | |
| Lighting, | 411 45 | | |
| General supplies, . . . | 23 10 | | |
| | <hr/> | 1,650 28 | |

Furnace Brook Parkway:—

| | | | |
|------------------|---------|-------|-----------|
| Labor, | \$33 05 | | |
| | <hr/> | 33 05 | |
| | | <hr/> | 80,151 78 |
| Balance, | | | \$161 22 |
| | | | <hr/> |

NANTASKET BEACH MAINTENANCE.

| | |
|---------------------------------|-------------|
| Appropriation for 1902, | \$15,000 00 |
|---------------------------------|-------------|

Expenditures.

| | | | |
|---------------------------------------|-------------|-------------|--|
| Labor, | \$1,339 75 | | |
| Police, | 8,576 93 | | |
| General supplies, | 484 84 | | |
| | <hr/> | | |
| <i>Amounts carried forward, . . .</i> | \$10,401 52 | \$15,000 00 | |

| | | | |
|---|--|-------------|-------------|
| <i>Amounts brought forward,</i> | | \$10,401 52 | \$15,000 00 |
| Watering, | | 794 24 | |
| Lighting, | | 1,080 39 | |
| Grading, | | 1,439 37 | |
| Repairs, | | 296 02 | |
| Water rates, | | 238 33 | |
| Telephones, | | 180 50 | |
| Furnishings for dormitory and police station, | | 176 12 | |
| Travelling expenses, | | 59 16 | |
| Express, | | 43 10 | |
| Safe, | | 37 50 | |
| Fire escapes, | | 37 50 | |
| Shrubs, | | 33 14 | |
| Dials for watchman's clock, | | 3 50 | |
| Miscellaneous, | | 142 68 | |
| | | | 14,963 07 |
| Balance, | | | \$36 93 |

METROPOLITAN PARKS EXPENSE FUND.

| | |
|-----------------------|--------------|
| Balance Jan. 1, 1902, | \$34,984 63 |
| Receipts, 1902, | 80,894 94 |
| | \$115,879 57 |

Expenditures.

Blue Hills Reservation:—

| | | |
|-------------------------------|---------|---------|
| Repairs, Canton Avenue house, | \$28 05 | |
| Telephone, | 44 25 | |
| | | \$72 30 |

Middlesex Fells Reservation:—

| | | |
|-----------------------------------|----------|--------|
| Repairs, Washington Street house, | \$109 26 | |
| Water rates, | 15 50 | |
| Telephone, | 92 | |
| | | 125 68 |

Revere Beach Reservation:—

Bath-house:—

Pay rolls, \$17,583 84

Boys' bath-

room, 3,128 80

Bathing suits, 1,654 73

Lighting, 1,404 32

*Am'ts carried**forward,* \$23,771 69

\$197 98 \$115,879 57

| | | | | |
|---------------------------------|--------|-------------|----------|--------------|
| <i>Am'ts brought forward,</i> | | \$23,771 69 | \$197 98 | \$115,879 57 |
| Coal, . . . | 907 40 | | | |
| Repairs, . . . | 590 99 | | | |
| Bath-house supplies, . . . | 578 36 | | | |
| Stockings, . . . | 382 50 | | | |
| Towels, . . . | 338 42 | | | |
| Water piping, . . . | 323 70 | | | |
| Stationery, . . . | 299 16 | | | |
| Medicines and attendance, . . . | 201 44 | | | |
| Ticket choppers, . . . | 165 00 | | | |
| Tickets, etc., . . . | 159 20 | | | |
| Paint, . . . | 153 29 | | | |
| Turnstiles, . . . | 150 00 | | | |
| Engine-room supplies, . . . | 147 22 | | | |
| Ice, . . . | 146 60 | | | |
| Bathing slippers, . . . | 120 00 | | | |
| Findings, . . . | 114 26 | | | |
| Bathing caps, . . . | 102 21 | | | |
| Hardware, . . . | 86 93 | | | |
| Wire railing and guards, . . . | 86 00 | | | |
| Furnishings, . . . | 82 74 | | | |
| Uniforms, . . . | 78 76 | | | |
| Rubber rings, . . . | 69 00 | | | |
| Lumber, etc., . . . | 63 46 | | | |
| Telephones, . . . | 32 80 | | | |
| Water rates, . . . | 29 26 | | | |
| Signs, . . . | 27 77 | | | |
| Truck, . . . | 27 60 | | | |
| Flags, . . . | 25 05 | | | |
| Valuable checks, . . . | 17 62 | | | |
| Tide cards, . . . | 16 00 | | | |
| Brushes and combs, . . . | 10 50 | | | |
| Dials for watch clock, . . . | 6 00 | | | |
| Mirrors, . . . | 4 75 | | | |
| Miscellaneous, . . . | 251 21 | | | |
| | | 29,566 89 | | |
| Land, | | 3,240 74 | | |
| Grading, | | 1,005 01 | | |
| <i>Am'ts carried forward, .</i> | | \$33,812 64 | \$197 98 | \$115,879 57 |

| | | | |
|--|-------------|--------------|--------------|
| <i>Am'ts brought forward, .</i> | \$33,812 64 | \$197 98 | \$115,879 57 |
| Superintendent's house :— | | | |
| House, . . . \$6,314 80 | | | |
| Heating . . . 349 06 | | | |
| Architects, . . . 250 00 | | | |
| | 6,913 86 | | |
| Repairs, Ocean Avenue, . . . 285 00 | | | |
| Sanitary building, . . . 4,224 90 | | | |
| Water service, . . . 666 25 | | | |
| Canvas covers, . . . 150 00 | | | |
| Lantern, office, . . \$170 00 | | | |
| Lantern, archi- tects', . . . 10 00 | | | |
| | 180 00 | | |
| Telephone, 136 97 | | | |
| Miscellaneous, 24 50 | | | |
| | 46,394 12 | | |
| Stony Brook Reservation :— | | | |
| Telephone, \$0 35 | | | |
| | 35 | | |
| Beaver Brook Reservation :— | | | |
| Painting Superintendent's house, \$62 16 | | | |
| Portable lunch stand, . . . 68 00 | | | |
| | 130 16 | | |
| Hemlock Gorge Reservation :— | | | |
| Painting house, \$76 00 | | | |
| Furnace pipe, 14 25 | | | |
| Water rates, 11 50 | | | |
| | 101 75 | | |
| Charles River Reservation :— | | | |
| Riverside Section :— | | | |
| Rent, \$275 00 | | | |
| Painting, Forest Grove, . . 115 70 | | | |
| Repairs to bridge, Forest Grove, 185 99 | | | |
| Repairs to shelter, Forest Grove, 38 12 | | | |
| Construction, Moody Street, 79 30 | | | |
| Water rates, 41 44 | | | |
| Miscellaneous, 3 75 | | | |
| | 739 30 | | |
| <i>Amounts carried forward,</i> | \$47,563 66 | \$115,879 57 | |

Amounts brought forward, . . . \$47,563 66 \$115,879 57

Speedway Section:—

| | | | | |
|------------------------|---|---|---|---------|
| Repairs, Walker-Pratt | . | . | . | |
| property, | . | . | . | \$95 17 |
| Grading, Walker-Pratt | . | . | . | |
| property, | . | . | . | 172 00 |
| Repairs, wharf stable, | . | . | . | 78 55 |
| Telephone, | . | . | . | 21 60 |
| Miscellaneous, | . | . | . | 6 00 |
| | | | | <hr/> |
| | | | | 373 32 |

Neponset River Reservation:—

| | | | | |
|------------------------|---|---|---|---------|
| Repairs, Hollingsworth | | | | |
| house, | . | . | . | \$22 24 |
| | | | | <hr/> |
| | | | | 22 24 |

Mystic River Reservation:—

| | | | | |
|-----------------------------|---|---|---|---------|
| Water rates, | . | . | . | \$66 00 |
| Refund for house (Griffin), | . | . | . | 50 00 |
| Repairs, Meagher house, | . | . | . | 17 48 |
| Fencing, Bean's Wharf, | . | . | . | 5 86 |
| | | | | <hr/> |
| | | | | 139 34 |

Blue Hills Parkway:—

| | | | | |
|----------------|---|---|---|---------|
| Portable shop, | . | . | . | \$66 00 |
| | | | | <hr/> |
| | | | | 66 00 |

Revere Beach Parkway:—

| | | | | |
|---------------------------|---|---|---|----------|
| Horse, | . | . | . | \$250 00 |
| Repairs, Gladstone Street | | | | |
| house, | . | . | . | 20 25 |
| Water rates, | . | . | . | 18 00 |
| Miscellaneous, | . | . | . | 19 72 |
| | | | | <hr/> |
| | | | | 307 97 |

Neponset River Parkway:—

| | | | | |
|------------------------------|---|---|---|---------|
| Water rates and connections, | . | . | . | \$29 01 |
| Repairs, | . | . | . | 6 75 |
| | | | | <hr/> |
| | | | | 35 76 |

Nahant Beach Parkway:—

| | | | | |
|-----------|---|---|---|----------|
| Sanitary, | . | . | . | \$182 88 |
| | | | | <hr/> |
| | | | | 182 88 |

Fresh Pond Parkway:—

| | | | | |
|-----------|---|---|---|---------|
| Drainage, | . | . | . | \$22 47 |
| | | | | <hr/> |
| | | | | 22 47 |

Amounts carried forward, . . . \$48,713 64 \$115,879 57

Amounts brought forward, . . . \$48,713 64 \$115,879 57

Nantasket Beach Reservation:—

Bath-house:—

| | |
|---------------------------------|------------|
| Pay rolls, . . . | \$5,143 91 |
| Coal, . . . | 1,070 51 |
| Bath-house supplies, . . . | 397 71 |
| Paint, . . . | 231 54 |
| Bathing suits, . . . | 228 68 |
| Stationery, . . . | 188 10 |
| Medicines and attendance, . . . | 82 44 |
| Hardware, . . . | 66 50 |
| Stockings, . . . | 57 50 |
| Engine room supplies, . . . | 53 78 |
| Uniforms and badges, . . . | 44 24 |
| Ice, . . . | 37 94 |
| Water rates, . . . | 35 59 |
| Lighting, . . . | 34 80 |
| Rubbish barrels, . . . | 32 00 |
| Rubber rings, . . . | 21 50 |
| Bathing caps, . . . | 21 00 |
| Telephones, . . . | 19 43 |
| Lumber, etc., . . . | 18 32 |
| Findings, . . . | 17 25 |
| Bags, . . . | 16 75 |
| Water coolers, . . . | 15 00 |
| Brushes and combs, . . . | 10 50 |
| Miscellaneous, . . . | 23 05 |

\$7,868 04

Alterations and improvements in buildings, . . .

| | |
|-----------------------------------|-----------|
| Boiler and laundry house, . . . | 12,518 79 |
| Piping, | 3,074 34 |
| Laundry machinery, . . . | 2,015 95 |
| Boiler and piping, . . . | 653 28 |
| Shutters, | 400 98 |
| Bathing suits, | 475 00 |
| Towels, | 2,036 83 |
| Turnstiles, | 336 00 |
| Ticket choppers, | 150 00 |
| Looking-glasses and frames, . . . | 150 00 |
| Cash registers, | 119 16 |
| | 190 00 |

Am'ts carried forward, . . . \$29,988 37 \$48,713 64 \$115,879 57

| | | | |
|---|-------------|-------------|--------------------|
| <i>Am'ts brought forward, .</i> | \$29,988 37 | \$48,713 64 | \$115,879 57 |
| Tickets and cabinets, . . . | 96 75 | | |
| Bath slippers, . . . | 60 00 | | |
| Stockings, . . . | 52 50 | | |
| Bathing caps, . . . | 30 25 | | |
| Furnishings, . . . | 73 80 | | |
| Duck coats and caps, . . . | 33 75 | | |
| Window shades, . . . | 56 25 | | |
| Hand cart, . . . | 27 75 | | |
| Rings and snaps, . . . | 10 31 | | |
| Valuable checks, . . . | 10 00 | | |
| Wringers, . . . | 10 00 | | |
| Police, . . . | 1,203 93 | | |
| Bulkhead, . . . | 959 56 | | |
| Labor and materials, . . . | 791 00 | | |
| Architects, . . . | 424 21 | | |
| Mechanical engineers, . . . | 57 05 | | |
| Telephone, . . . | 57 01 | | |
| Drain pipe, . . . | 24 00 | | |
| Miscellaneous, . . . | 42 86 | | |
| | <hr/> | 34,009 35 | |
| | | <hr/> | 82,722 99 |
| Balance in hands of State Treasurer, | | | <u>\$33,156 58</u> |
| Metropolitan Parks Trust Fund: — | | | |
| Receipts, Augustus Hemenway, | \$10,000 00 | | |
| Receipts, estate of Charles Van Brunt, | 5,000 00 | | |
| | <hr/> | | \$15,000 00 |
| Expended Jan. 1, 1903, for Neponset River Reservation, land, | | | <hr/> 14,932 40 |
| Balance in hands of State Treasurer, | | | <u>\$67 60</u> |

APPENDIX.

APPORTIONMENT COMMISSION.

MEMORANDUM OF EXPLANATION OF THE GROUNDS
OF THE COMMISSIONERS' ALLOTMENT OF MET-
ROPOLITAN PARK DISTRICT EXPENSES AMONG
THE SEVERAL MUNICIPALITIES COMPOSING THE
DISTRICT, AND OF THE PROCESS AND COMPU-
TATIONS THROUGH WHICH THE SEVERAL PER-
CENTAGES WERE FIXED.

Commissioners.

CHARLES FRANCIS ADAMS, of LINCOLN.
THOMAS M. STETSON, of NEW BEDFORD.
JOHN C. HAMMOND, of NORTHAMPTON.

Award filed, September, 1900; award approved, February, 1902.

After receiving the briefs, listening to all the arguments of the counsel representing the different municipalities, and visiting the principal reservations, the Commissioners entered upon the consideration of their award.

It had been contended by certain of the counsel, especially those representing Cambridge and Brookline, that the award should be based on local benefits; that is, the localities specially profiting by the parks, either as places of enjoyment, or because of the increased value of property incident to them, should pay for the same; and the degrees of benefit thus enjoyed, and the money value thereof, should be arrived at, as closely as might be, through the exercise of a sound business judgment applied to facts or statistics in evidence, or derived from a study of the situation.

On the other hand, it was contended by the representatives of municipalities differently placed, that the Metropolitan Parks District must be looked upon as one large municipality created by the Legislature for a special purpose, and the several towns and cities should be treated as wards, or divisions, of the larger municipality. The original cost, and the expense of maintenance, of the reservations, should then be assessed according to valuation in the usual

way; on the same principle, and in the same way, that the cost of the parks and avenues of the city of Boston, for instance, are assessed on one municipal aggregate, composed of the several wards of that city.

In entering upon the consideration of their award, the Commissioners endeavored to ascertain what results could be arrived at through the course first indicated. They found themselves unable to reach any principle of decision satisfactory to themselves. The two beaches, Nantasket and Revere, for instance, were distinctly State, rather than District, reservations. They had cost large sums, the whole of which was a burden on the municipalities composing together the Metropolitan Parks District; yet no data of even the most general character existed to indicate the relative benefit of those reservations to the inhabitants of the State at large as compared with those of the Metropolitan District, or to those of any individual town or city of the District as compared with those of the other cities and towns. It was, again, impossible to distinguish how much benefit the city of Cambridge and the town of Brookline derived from the Boston Park System, which, though not part of the Metropolitan Reservations, yet had to be considered in connection with them. On account of that local system of its own, costing nearly seventeen millions of dollars, Boston had been allowed a considerable reduction from its normal percentage, on a valuation basis, of the cost of the entire Metropolitan District System. (Report of the Board of Metropolitan Park Commissioners, Leg. Docs., 1893, House No. 150, p. xv.) This allowance had been transferred to the District at large exclusive of Boston, and, in greatest part, ought equitably to be borne by the parties deriving the most advantage therefrom, if such could be ascertained. These parties unquestionably were, in large degree, Cambridge, as interested in the improvement of the Charles River basin, and Brookline, as immediately adjoining Boston's Franklin Park, the Arboretum, the Jamaica Plain Park and the Fenway; which last, indeed, serves as the main avenue of communication between Brookline and Boston. But some other municipalities derived benefit from the Boston Park System to an extent, greater or less, but difficult exactly to estimate or apportion. Exact or even reliable approximate figures could not be reached.

So far as the Metropolitan District itself was concerned, it was, again, wholly impossible for the Commissioners to arrive at an allotment based on the degree of use of any one of the different parkways and reservations by the inhabitants of the several towns

and cities composing the District. Proximity, as a measure of such use, is a mere rule-of-thumb, and no statistical data are obtainable.

The Commissioners, therefore, found themselves compelled to abandon the Benefit Basis, as it may be called, and to adopt the Special-Municipality Basis, from which to start in making an apportionment.

Having decided to adopt the Special Parks-Municipality Basis, the Commissioners next had to decide whether cost and expenses of maintenance should be apportioned according to the valuation (wealth) of the various cities and towns of the District, or, taking population into account, on the probable approximate use by them of the several parkways and reservations.

Tentatively adopting the system devised by the Sewer Commission, of apportioning original cost on valuation and maintenance on the basis of population, the Commissioners caused elaborate tables to be prepared showing what in this case would result from so doing. An apportionment obtained on this basis did not commend itself to the judgment of the Board, proving, in view of all the considerations involved, neither just nor equitable. This system, as a basis of allotment, had accordingly to be abandoned.

It only remained, therefore, to consider the different municipalities as wards or divisions of one large municipality created for a special purpose, and to apportion both original cost and maintenance to the several municipalities composing the District on valuation as a general basis, Boston in every case bearing one-half of the total expense.

The Commissioners then considered an award based strictly on valuations, recognizing no equities and making no allowances. This simple solution of the problem failed, on more thorough consideration, to commend itself. It did not bear the test of practical application. Certain towns (*e.g.*, Weymouth), it appeared, had been added to the District only for reasons of convenience, while the inhabitants thereof did not benefit in any way from the reservations, or make any ascertainable use of them. Some of these towns had, at the inception of the system, been recognized as what were called "fringe towns", and made part of the District only on geographical considerations. (Report of the Board of Metropolitan Park Commissioners, Leg. Docs., 1893, House No. 150, p. 20.) Certain other municipalities had again, like Boston, contributed largely from their individual resources towards the Metropolitan Park System, looked at as a whole; and it seemed only just and equitable that what they had thus con-

tributed should be taken into consideration in assigning their percentages. An example was to be found in the cases of Lynn and Cambridge, — the former had contributed to the system as a symmetrical whole an entire park of 2,000 acres, and also maintained it; while Cambridge had incurred a heavy burden in connection with the Charles River basin.

The Commissioners, therefore, determined to recognize, and in all cases allow for, what may be called individual, or local, contributions thus made to the general Metropolitan scheme; but, in so doing, not to take lesser open spaces or local play-grounds into account.

It was matter within the knowledge of the Commission that the Legislature had itself recognized this general principle when it assigned an arbitrary percentage (50 per cent.) in the case of Boston. (Report of Advisory Commission, Leg. Docs., 1893, House No. 150, p. xv.) From this exceptional case a general rule could, furthermore, be adduced. Accepting the valuation of Boston, as compared with the valuation of the entire District, as a normal level for that city's apportionment, it was found that, for each 1 per cent. of the entire valuation invested by Boston in its parks, the Legislature had allowed to that city a reduction of, approximately, 10 per cent. from what its normal percentage allotment would have been had no such allowance been made. This rule the Commissioners now tentatively applied to other municipalities; and it was found, for instance, that Cambridge had actually invested in the improvement of the Charles River basin alone a larger percentage of its valuation than had been invested by the city of Boston in its entire park system. A rule of allowance was, therefore, formulated, based upon the case of Boston; and this rule was applied to all the other towns and cities of the District which had made expenditures for parks which could properly be considered part and parcel of the Metropolitan Parks District Reservation System. Each one of the municipalities which had made an investment of this character was accordingly duly credited with the cost of the burden so incurred; and this reduction of allotment was necessarily thrown on the municipalities composing the District taken as one whole, but exclusive of Boston. The table thus arrived at introduced material modifications into the primary table, based solely on valuations. (For details, see Schedule A.)

The Commissioners next took into consideration the wealth and geographical position of the different municipalities, and endeavored, under some general rule, to apportion burden to strength.

To this end, the municipalities composing the District were divided into three classes, viz.: (1) those the valuation of which was less than \$1,000 to each inhabitant; (2) those in which it was between \$1,000 and \$2,000; and (3) those in which it was in excess of \$2,000. It was found that a certain number of municipalities, principally "fringe towns", including the city of Lynn,—which, as already pointed out, had contributed an entire park of 2,200 acres to the system,—came within Class I,—or what might be called the class of towns and cities of more moderate means; the great bulk of municipalities came within the second class, or Class II; a lesser number of towns and cities had a valuation in excess of \$2,000 per inhabitant, constituting Class III. After full consideration, it was decided that it would not be inequitable to apply a rough rule under which 25 per cent. of the burden, which would naturally fall were the rule of valuation alone applied upon the less well-to-do communities, should be transferred to the richer communities, the computation in each case being made on the valuation basis. Under the operation of this rule, annual payments to the aggregate amount of \$15,260.22 were taken from 13 municipalities and imposed on 6. An examination of each individual case so affected then satisfied the Commissioners that, in practice, this rule worked equitably, the municipalities relieved being in almost all cases "fringe towns", or communities deriving small benefit from the large reservations; while those on which the transferred burden fell were almost invariably those in more immediate proximity to the reservations, and deriving most benefit from them. Each instance having been separately considered, this modification was therefore made; and the result thus reached presented a new table of allotments, which included two variations from the original (valuation) basis.

The Reservations being thus disposed of, it remained to consider the Boulevards. The law in the case of Boulevards provided that one-half of their cost should be borne by the Commonwealth at large; one half of what remained, or 25 per cent. of the whole, by the city of Boston; and the remaining 25 per cent. only by the other municipalities composing the Metropolitan District. This last 25 per cent. was, therefore, all that it fell within the province of the Commissioners to apportion.

After full consideration, it was decided that the rule which the Legislature had applied to the Boulevard expenditure as a whole should be experimentally applied to the District as regards its portion (25 per cent.) of that expenditure; that is, one-half of the burden to be imposed upon the municipalities, exclusive of

Boston, — or $12\frac{1}{2}$ per cent. of the total loan, — should be apportioned among the municipalities of the entire District, excluding Boston; while the remaining $12\frac{1}{2}$ per cent. should be imposed upon the several particular municipalities in which the money had been spent and Boulevards constructed, as being in the nature of a local betterment to those municipalities. A table was accordingly worked out on this basis. The rule was found to work with severity upon certain municipalities in which much Boulevard construction had been done; but, on the other hand, it was also found that the real estate of those municipalities abutting upon the boulevards in question had been greatly increased in value. The municipalities in question had, consequently, derived from the taxation of such property-increment, the means of meeting the additional burden thus thrown upon them. The application of the rule for this reason commended itself to the judgment of the Commissioners as, upon the whole, just and equitable to all concerned. (For details, see Schedule B.)

Having thus disposed of the Boulevards, as well as the Reservations, in order to arrive at a final allotment it only remained to combine the two results. This was a simple process of arithmetical computation, and the percentages as finally awarded resulted therefrom.

Upon examining the result thus reached, the only items which impressed the Commissioners as presenting exceptional features, and being possibly somewhat onerous, were the percentages fixed in the cases of Brookline, Nahant, Newton, Milton, Medford, Winchester and Revere. All of these might at first seem abnormally large. They, for that reason, called for special examination.

Taking them into consideration *seriatim*, the Commissioners, as a result of personal inspection of localities and inquiry into circumstances and conditions, found that, in the case of Brookline, after allowance had been made for \$500,000 invested by that town in the Muddy Brook improvement, it, with the largest valuation (\$74,251,728) in the District, exclusive of Boston and Cambridge, was both indisputably and greatly benefited by Boston's individual Park and Boulevard construction. In the judgment of the Board, it was neither unjust nor inequitable to take this fact into consideration; indeed, to reach any equitable result, it had to be taken into consideration. It is understood generally, and the Commissioners had personal cognizance of the fact, — already referred to in this statement, — that the Boston percentage was arbitrarily fixed by the Legislature at 50 per cent. of the whole, because of its individual expenditure. Its allotment was

thus 12 per cent. less than it would have been (62 per cent.) if made on a strict valuation basis. This 12 per cent. represented a payment of over \$50,000 per annum, which allowance to Boston had in some way to be apportioned among, and imposed upon, the other cities and towns, composing the Metropolitan District. Further examination made it manifest that the inhabitants of Brookline, proportionately to wealth and population, derived hardly less benefit from the Boston Park System than did the inhabitants of Boston itself. Indeed, in view of all the facts thus brought in evidence, it would not have been inequitable had the entire annual amount (\$50,000) of which Boston was relieved been imposed upon Brookline alone, inasmuch as Brookline enjoys, at an expense not exceeding \$20,000 a year (4 per cent. on \$500,000), the full benefit of a Park and Boulevard system which represents an outlay by itself and Boston of probably not less than \$10,000,000. No other community in the District is thus fortuitously favored; for it so chances that the Muddy Brook Driveway, the Jamaica Pond Reservation, the Arnold Arboretum and Franklin Park, are, as a whole, more convenient and more serviceable to the inhabitants of Brookline than they are to those of any one of the wards of Boston itself; yet the first-named place in no degree contributed to their cost. So far as towns or cities other than Boston were concerned, Brookline derives from the Boston Park System more benefit than do the inhabitants of all the others combined. While, however, these facts and considerations did not affect the percentages which had otherwise and previously been reached, it did, so far as Brookline was concerned, clearly tend to confirm the justice and equity of the apportionment. The percentage in their award imposed upon Brookline seemed to the Commissioners on full consideration to err, if at all, on the side of moderation; but it was not considered expedient on that account to make an exception to a fair general rule.

In the case of Nahant, it was argued that Nahant derived no benefit whatever from the system of Metropolitan Reservations, being practically an island, and so remote as to be scarcely in communication with that system. This the Commissioners found in a certain sense correct. On the other hand, while the Nahant percentage of payments was reached through the application of general rules and principles, a modification of those rules for the special relief of that community could be urged only on proof of some unfairness inflicted, or at least an absence of equity. Such did not appear. Nahant reports an exceptionally large personal property valuation, — a valuation usually understood to be due to

the presence there, as residents, of a considerable number of persons naturally belonging to Boston, who have been induced to domicile themselves elsewhere in order to enjoy the advantages of lighter taxation. This, on their part, was a perfectly legitimate proceeding. While this assumption of a fact not proven before the Commissioners, though within their individual knowledge, would not have justified them in imposing any unusual or exceptional burden on Nahant, yet, when it came to the question of relieving Nahant of a portion of the burden which naturally fell to it under the application of certain general rules of apportionment, it seemed to the Commissioners neither unjust nor inequitable that those who had presumably escaped the heavy burden of the Boston Park System, the benefits of which they still to a great extent enjoyed, should bear the share of the expense of the Metropolitan District System, which naturally fell to them. The case of Nahant, therefore, failed to commend itself to the judgment of the Commission as one of hardship.

The cases of Milton, Medford and Winchester can be considered together, the circumstances being much the same. All these towns enjoy a handsome valuation, — Milton \$22,000,000, Medford nearly \$20,000,000, Winchester nearly \$10,000,000. Each, also, had been peculiarly favored in the matter of both Reservations and Boulevards, — Milton by the large Blue Hill Reservation, to which it practically owed its continued existence as a residence town, and Medford and Winchester by the Middlesex Fells Reservation, of which they enjoyed the benefit probably more than any other municipalities adjacent thereto. As respects Boulevards also, Milton had one from Mattapan direct to the Blue Hills, while Medford and Winchester were found to be actually surrounded, as well as bisected, by Parkways, Boulevards or Reservation. Undoubtedly all three municipalities derived a large benefit in increased valuation both from the Reservations, and from the Boulevards and Driveways within their limits. In no one of these cases, therefore, did it seem that a hardship was made out calling for any arbitrary relief from the application of the general rules for their own guidance laid down by the Commissioners. The three towns are all essentially Boulevard towns, and as such it is right and proper that they should bear a portion of the cost of the roads constructed within their limits.

The case of Revere was one of unquestionable hardship, and the Commissioners gave careful consideration to it. Practically, the Commission thought that neither Nantasket Beach nor Revere Beach should have been Metropolitan District Reservations. Like Wachu-

sett, both those beaches should have been assumed by the Commonwealth, inasmuch as the benefits derived from them were participated in by the inhabitants of the State at large. For instance, in the case of Nantasket, it is notorious that the inhabitants of Brockton and the valley of the Connecticut frequent it to a larger extent, in proportion to numbers, than do the inhabitants even of Boston or any other municipality included in the Metropolitan Parks District. In like manner, in the case of Revere Beach, it is understood that the inhabitants of Lowell and of other towns of the north-eastern portion of the State, outside the District, are in the habit of having general recourse to it. While, therefore, Revere has unquestionably derived a large increase in valuation of its taxable real estate by the improvement of its Beach, it nevertheless seems unjust that Revere should bear so large a proportion of the cost of a sea-side reservation intended for the benefit of the entire State. This hardship, however, it did not come within the province of this Board to remedy. The Commissioners thought that the proper remedy in the case of Revere would be reached by a special act of relief passed by the Legislature, applicable to the case, and extending the burden over the entire State, rather than through an arbitrary violation of the fundamental rules on which their allotment was based, which rules were just and equitable in themselves, while a violation of them could only affect the towns and cities of the Metropolitan Parks District. It was, therefore, decided not to make any exception in favor of Revere in this award; but, should legislative or other explanation be called for, the Commissioners would present the considerations above set forth, and agree in urging a measure of relief in that particular case, by imposing upon the treasury of the Commonwealth a portion of the burden which, under the rules regulating allotments, would naturally fall to Revere.

In the case of Newton, it can be said that Newton is a city of large valuation, — nearly \$60,000,000, — of much wealth per inhabitant, and centrally located in the Metropolitan District. The rules applied by the Commissioners chance to work severely in the case of Newton. On the other hand, that municipality is well able to bear the burden, in no way excessive, resulting from the application of those rules; and, while recognizing the burden thus imposed, the Commissioners did not consider that conditions were presented which called for an arbitrary exception. The hardship, so far as it existed, was necessarily incidental to the operation of rules generally equitable, and which as a whole led to results manifestly not unfair.

Much consideration was given to the allotment in the case of Cohasset. It was agreed by the Commissioners that, while Cohasset probably was not legally in the general Metropolitan Parks District, yet, so far as the special reservation known as the Nantasket Beach Reservation was concerned, Cohasset was an essential part of it; and it seemed only reasonable that it should bear more than its proportional part of the burden of that special Reservation as reached on a strict basis of relative valuations. On the other hand, it appeared that Cohasset had derived no benefit from the Nantasket Beach improvements. On the contrary, Strait's Pond not having been included in the takings, the Metropolitan Park police regulations did not apply to Green Hill and the adjacent beach; while, it was understood, the object the people of Cohasset had in view in consenting to be made a part of the Metropolitan District, so far as Nantasket Beach was concerned, was to have the regulations apply to those localities. Cohasset, therefore, had not derived the advantage from the Reservation which it would have derived had Strait's Pond been included in the takings; but had Strait's Pond been so included, the allotment of Cohasset would have been much larger than that now made in the schedule, probably amounting to 6, or even to 8, per cent. of the entire Nantasket Beach loan. As Strait's Pond was not included in the taking, it was agreed by the Commissioners that twice its normal proportion would be a light, but not inequitable, burden to impose upon Cohasset, in view of contingent benefits derived from the sweeping away of the nuisances which formerly existed just beyond the town's limits. This allotment, therefore, was assigned by the Commissioners as being in their opinion just and equitable under all the circumstances of the case.

Finally, in the deliberations of the Commission, the allotments reached after considering all equities, and making the allowances above set forth, were carefully, item by item, compared with the normal level which would have been reached had the different municipalities been considered simply as wards of one large city, with percentages assigned according to valuation, as was done in the case of the Park System of the city of Boston. After carefully weighing each individual allotment, the Commissioners were of opinion that, taken as a whole, the changes which had been made from the normal valuation level were distinctly in the line of equity and justice, and tended to the more equal distribution of a general burden. Upon this basis the award was finally adopted and filed, all the Commissioners concurring therein.

Statistical tables are appended to this statement of reasons,

setting forth in detail the several processes through which the Commissioners went in applying the foregoing rules. These tables will, upon examination, show: (1) the exact variations from the normal percentage, — that of valuation, — allowed on account of local park contributions made to the general system by the individual municipalities; (2) the allowances on account of small or excessive valuation, made to certain towns and imposed upon others; (3) the variations, in the way of betterment, because of Boulevard construction within the limits of certain municipalities; and (4) the total amount, both in percentage and in money, by which, under the application of the rules applied by the Commissioners, the percentage of each city or town varied from the normal percentage which would have fallen to that city or town on the basis of valuation, without regard to equities or other considerations.

ADDITIONAL MEMORANDA, MADE BY MR. ADAMS IN CONNECTION
WITH THE FOREGOING STATEMENT.

In the course of the hearings before the Commissioners, two points were made by counsel which have an historical connection. The facts relating to them chance to be within my special personal and official cognizance.

It was in the first place argued that, had the Legislature intended that the apportionment in this case should be made according to valuation, it would have so provided in the Act, or directed such course to be pursued.

A similar statement is found in the award of the previous Commission of 1894, set aside by Act of Legislature of 1895.

The original bill creating a Metropolitan Park Commission, and authorizing it to proceed with its work, was drawn up in large part by me, as chairman of the Advisory Commission of 1892. The question of meeting the expense of the development proposed was a serious one, and presented a dangerous possible obstacle to the passage of the measure. It would have been very difficult, if not impossible, to propose any system to which no one of the many parties concerned would not make strong exception. The Act, therefore, was drafted by the Advisory Commission and submitted to the Legislative Committee, by which it was subsequently reported, with a provision designed by the Commission to avoid this dangerous issue. The intention, historically speaking, was to defer, or evade, an awkward question which not impossibly might prevent — indeed, probably would prevent — the passage of the proposed measure. It was also thought, and correctly

thought, that, in making an apportionment, certain equities might have to be taken into consideration, such as local contributions to the proposed system as an entirety, or local benefits in the nature of betterment to be derived from work thereafter done. It was intended, therefore, that the discussion of the whole subject of payments should be postponed to a future time, and then left in the hands of a Commission to effect an equitable adjustment, without confining that Commission to any hard-and-fast system or rule in so doing. It might, in the light of experience, base its allotment on valuation alone, or on population, or on both; or on benefits and burdens; but it was not the legislative intention either to dictate a basis of award or lay down any rules for reaching an apportionment. The matter was left to be disposed of intelligibly in the light of future developments. No correct inference other than this can be drawn from the Act, whether from language used, or omitted.

At the hearings doubt also seemed to exist in certain quarters as to the reason why an arbitrary allotment of 50 per cent. had been fixed by the Legislature in the case of Boston. I am also personally and officially cognizant of the considerations which led to this result.

As chairman of the Advisory Board of 1892, and so having the legislative business connected with the passage of the bill largely in my hands, the first and most difficult question to be disposed of was the attitude towards it of the city of Boston. While this matter was under anxious consideration, the Hon. Nathan Matthews, Jr., then mayor of Boston, called one day at my office. Mayor Matthews was deeply interested in questions of park development generally, and had been largely instrumental in promoting the parks of the city of Boston. He informed me that he came to see me officially in relation to this matter, stating that, in view of the enormous expenditure — then amounting to some \$14,000,000 — which had been made by the city of Boston for its local parks, it did not seem equitable that the city should be called upon also to bear its full share of the burden of the proposed Metropolitan Park System; that is, having provided parks within its own limits, it ought not to be called upon to provide parks in other towns and cities. He then went on to say that the city would not oppose the passage of the measure under consideration if the proportion of the cost to be incurred under it to be paid by Boston was limited in the Act to 50 per cent. of the entire expenditure. As chairman of the Advisory Commission, I was somewhat taken by surprise at what seemed to me the

liberality of this proposition, and at once acceded to it. The provision limiting the liability of the city of Boston to 50 per cent. of the entire expenditure was accordingly inserted in the original draft of the measure by me (report of Advisory Commission of 1892, Leg. Docs., 1893, House No. 150, pp. xv, 122), and was adopted by the Legislative Committee. The city of Boston, consequently, and in pursuance of the understanding thus reached, did not appear in opposition to the passage of the Metropolitan Parks Act, but gave to it a quiet support.

It now appears that, were the entire Park System, local and district, of the Metropolitan District, to be pooled, — that is, were the various municipalities reimbursed for the cost of all the parks which had been constructed, on the ground that it was a general benefit, — the expenditure would foot up, approximately, as follows: —

| | |
|--|----------------|
| Boston Local Park System, | \$16,700,000 |
| Various Local Parks outside of Boston, | 3,300,000 |
| Metropolitan District Park System, | 8,000,000 |
| | <hr/> |
| | \$28,000,000 . |

Of this amount, Boston contributed \$16,700,000 through its local parks, and 50 per cent., or \$4,000,000, through its liability for the Metropolitan District Parks and Boulevards, making a total in the neighborhood of \$21,000,000 out of the entire expenditure of \$28,000,000. This represents 75 per cent. of the aggregate expended.

The population of Boston was, by the census of 1895, 48 per cent. of the total population of the Metropolitan Parks District, including Boston.

The valuation of Boston was 62 per cent. of the total valuation of the Metropolitan Parks District, including Boston.

It therefore appears that, taking the District as a whole, and including the entire expenditure within its limits for park purposes, local and general, the city of Boston; with 48 per cent. of the population and 62 per cent. of the valuation, contributed 75 per cent. of the total amount.

The justice of some arbitrary legislative allowance on this account to Boston is, therefore, apparent. That given was far less than might fairly have been demanded. The historical facts leading up to the allotment of 50 per cent. as the proportion of Boston I have recounted, as above.

BOSTON, April 21, 1902.

After full consideration, the Commission of 1900 concluded, at the time of reaching its award in September of that year, that it was undesirable to file any formal reasons therefor, involving, possibly, disputed legal questions; this for the obvious reason that so doing would necessarily cause discussion among the many municipalities concerned as to the principles on which the award was based, and probably so furnish grounds for prolonged dilatory proceedings. It was, however, deemed proper and expedient that a statement of reasons, etc., should be drawn up, as matter of record, and at the proper time filed for the information and use of any similar boards of apportionment which might hereafter be appointed. The foregoing record was therefore at that time prepared, submitted to the Commissioners, and by them agreed to as a correct statement of principles applied, processes of computation gone through with and results reached.

The award, as then filed (Sept. 11, 1900), was without any statement of reasons, and on that ground was objected to by certain of the municipalities concerned. The objection being sustained by the Supreme Court, the award was remanded to the Commissioners with instructions to set forth a general statement of facts and principles connected therewith. Owing to the somewhat peculiar language used by Chief Justice Holmes in the opinion of the court (*de las Casas*, Petitioner, 178 Mass. 213), the Commissioners decided that a less detailed statement than the foregoing, unaccompanied by statistics, tables, etc., would best meet the requirements of the case in the stage it had thus far reached. Such an additional statement was thereupon drawn up, and the award, with that statement appended, was again filed. In that form it was sustained and approved (Feb. 27, 1902) by the court.

The foregoing original and additional statement of reasons, tables, statistics, etc., is now filed by the undersigned, with the Metropolitan Park Commission, purely as a matter of record, and for the information and use of all concerned whenever another apportionment of expenses, etc., may be in order.

CHARLES F. ADAMS.

SCHEDULE B.

Table showing the Several Consecutive Processes of Allowance and Reduction through which the Final Award of Percentages was reached; with a Comparative Table showing the Final Percentages allotted, as compared with Percentages reached on the Basis of Simple Valuation with the Gain enjoyed or Loss sustained through the Application of the Rules formulated by the Commissioners.

| PARKS. | | | | | | | | | | | | | | BOULEVARDS. | | | | | | | | | | | |
|-------------------------|---|--------------|--|------------|---|-------------|---|-------------|-----------|------------|-----------|------------|---------------------------|--------------|---|--|--|---------|--------------|-------------------|--------------|--|--------------|-------------|-------------|
| NAME OF CITY OR TOWN. | Apportionment on Simple Basis of Valuation. | | Allowance for Contributory Park Construction, on the Principle established in the Case of Boston, i. e., 10 Per Cent. reduction from Normal Assessment for each 1 Per Cent. of Valuation so spent. | | Rebate of 25 Per Cent. on Account of Low Valuation of Cities and Towns (added to the Assessment of Other Cities and Towns of High Valuation). | | Addition of the 25 Per Cent. rebate to Cities and Towns of Low Valuation. | | Gain. | | Loss. | | Net Assessment for Parks. | | Amount expended or incurred within the Limit of City or Town specified. | Assessment of 12½ Per Cent. of Cost for Betterment distributed in the Proportion the Local Disbursements bear to the Total District Disbursements. | Assessment of 12½ Per Cent. of Cost distributed on the Basis of the Valuation of the Several Cities and Towns. | Rate. | Amount. | Final Assessment. | | Valuation Assessment (for Per Cent. see First and Second Columns.) | | Gain. | Loss. |
| | Per Cent. | Amount. | Per Cent. | Amount. | Per Cent. | Amount. | Per Cent. | Amount. | Per Cent. | Amount. | Per Cent. | Amount. | Per Cent. | Amount. | | | | | | Per Cent. | Amount. | Per Cent. | Amount. | | |
| State of Massachusetts, | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 50.000 | \$89,216 13 | - | - | - | - | - | - |
| Boston, | 50.000 | \$214,353 52 | - | - | - | - | - | - | - | - | - | - | 50.000 | \$214,353 52 | - | - | - | 25.000 | 44,608 07 | 50.000 | \$258,961 59 | 50.000 | \$258,961 59 | - | - |
| Cambridge, | 7.244 | 31,055 54 | 20.795 | \$6,458 00 | - | - | - | - | 1.506 | \$6,458 00 | - | - | 5.738 | 24,597 54 | \$59,48 27 | \$648 86 | \$3,234 96 | 2.177 | 3,883 82 | 5.499 | 28,481 36 | 7.244 | 37,518 35 | \$9,036 99 | - |
| Chelsea, | 1.848 | 7,922 51 | 4.617 | 365 78 | .440 | \$1,889 18 | - | - | .526 | 2,254 96 | - | - | 1.322 | 5,667 55 | 95,55 80 | 1,042 24 | 832 33 | 1.051 | 1,874 57 | 1.456 | 7,542 12 | 1.848 | 9,571 22 | 2,029 10 | - |
| Everett, | 1.176 | 5,041 59 | 4.270 | 215 28 | .282 | 1,206 58 | - | - | .331 | 1,421 86 | - | - | .845 | 3,619 73 | 194,04 33 | 2,116 49 | 529 65 | 1.483 | 2,646 14 | 1.210 | 6,265 87 | 1.176 | 6,090 78 | - | \$175 09 |
| Lynn, | 4.109 | 17,615 57 | 1.903 | 335 22 | 1.008 | 4,320 09 | - | - | 1.086 | 4,655 31 | - | - | 3.023 | 12,960 26 | - | - | 1,846 25 | 1.035 | 1,846 25 | 2.859 | 14,806 51 | 4.109 | 21,281 50 | 6,474 99 | - |
| Malden, | 2.330 | 9,988 87 | 4.745 | 473 97 | - | - | - | - | .111 | 473 97 | - | - | 2.219 | 9,514 90 | 209,80 76 | 2,289 34 | 1,043 35 | 1.868 | 3,332 69 | 2.481 | 12,847 59 | 2.330 | 12,067 60 | - | 779 99 |
| Medford, | 1.514 | 6,490 63 | 4.968 | 322 45 | - | - | - | - | .075 | 362 45 | - | - | 1.439 | 6,168 18 | 532,50 33 | 5,808 55 | 675 23 | 3.634 | 6,483 78 | 2.443 | 12,651 96 | 1.514 | 7,841 26 | - | 4,810 70 |
| Melrose, | .991 | 4,248 49 | 10.134 | 430 54 | - | - | - | - | .101 | 430 54 | - | - | .890 | 3,817 95 | - | - | 443 30 | .248 | 443 30 | .823 | 4,261 25 | .991 | 5,132 62 | 871 37 | - |
| Newton, | 4.614 | 19,780 54 | 1.350 | 267 04 | - | - | 1.198 | \$5,135 33 | - | - | 1.136 | \$4,868 29 | 5.750 | 24,648 83 | - | - | 2,046 66 | 1.147 | 2,046 66 | 5.154 | 26,695 49 | 4.614 | 23,896 98 | - | 2,798 51 |
| Quincy, | 1.479 | 6,340 58 | - | - | .474 | 2,031 15 | - | - | .058 | 247 12 | - | - | 1.421 | 6,093 46 | 3,96 18 | 43 04 | 662 82 | .395 | 705 86 | 1.313 | 6,799 32 | 1.479 | 7,660 09 | 860 77 | - |
| Somerville, | 4.018 | 17,225 45 | 12.487 | 2,150 94 | - | - | - | - | .502 | 2,150 94 | - | - | 3.516 | 15,074 51 | 101,75 41 | 1,110 31 | 1,799 38 | 1.631 | 2,909 69 | 3.472 | 17,984 20 | 4.018 | 20,810 15 | 2,825 95 | - |
| Waltham, | 1.532 | 6,567 79 | 5.247 | 344 61 | - | - | - | - | .080 | 344 61 | - | - | 1.452 | 6,223 18 | - | - | 685 95 | .385 | 685 95 | 1.334 | 6,909 13 | 1.532 | 7,934 59 | 1,025 46 | - |
| Woburn, | .826 | 3,541 12 | - | - | .264 | 1,132 96 | - | - | .033 | 142 25 | - | - | .793 | 3,398 87 | - | - | 371 78 | .208 | 371 78 | .728 | 3,770 65 | .826 | 4,278 05 | 507 40 | - |
| Arlington, | .701 | 3,005 24 | - | - | - | - | - | - | - | - | .197 | 844 75 | .898 | 3,849 99 | - | - | 312 55 | .175 | 312 55 | .804 | 4,162 54 | .701 | 3,630 64 | - | 531 90 |
| Belmont, | .376 | 1,611 94 | - | - | - | - | - | - | - | - | .106 | 454 53 | .482 | 2,066 47 | - | - | 167 05 | .094 | 167 05 | .431 | 2,233 52 | .376 | 1,947 39 | - | 286 13 |
| Braintree, | .387 | 1,659 10 | - | - | .124 | 531 62 | - | - | .015 | 64 23 | - | - | .372 | 1,594 87 | - | - | 173 33 | .096 | 173 33 | .341 | 1,768 20 | .387 | 2,004 36 | 236 16 | - |
| Brookline, | 5.796 | 24,847 86 | 8.655 | 2,150 58 | - | - | 1.393 | 5,971 21 | - | - | .891 | 3,820 63 | 6.687 | 28,668 49 | - | - | 2,555 42 | 1.432 | 2,555 42 | 0.029 | 31,223 91 | 5.796 | 30,018 84 | - | 1,205 07 |
| Canton, | .364 | 1,560 49 | - | - | - | - | - | - | - | - | .102 | 437 28 | .466 | 1,997 77 | - | - | 162 69 | .091 | 162 69 | .417 | 2,160 46 | .364 | 1,885 24 | - | 275 22 |
| Dedham, | .680 | 2,915 21 | - | - | - | - | - | - | - | - | .191 | 819 03 | .871 | 3,734 24 | - | - | 302 67 | .170 | 302 67 | .779 | 4,036 91 | .680 | 3,521 88 | - | 515 03 |
| Dover, | .087 | 372 98 | - | - | - | - | - | - | - | - | .024 | 102 88 | .111 | 475 86 | - | - | 38 61 | .022 | 38 61 | .099 | 514 47 | .087 | 450 59 | - | 63 88 |
| Hingham, | .371 | 1,590 50 | - | - | .119 | 509 09 | - | - | .015 | 63 23 | - | - | .356 | 1,527 27 | - | - | 165 66 | .093 | 165 66 | .327 | 1,692 93 | .371 | 1,921 50 | 228 57 | - |
| Hull, | .294 | 1,260 40 | - | - | - | - | .099 | 424 37 | - | - | .181 | 775 96 | .475 | 2,036 36 | - | - | 129 82 | .073 | 129 82 | .418 | 2,166 18 | .294 | 1,522 70 | - | 643 48 |
| Hyde Park, | .759 | 3,253 89 | - | - | .243 | 1,040 70 | - | - | .031 | 121 80 | - | - | .728 | 3,122 09 | 43,926 43 | 479 12 | 340 10 | .459 | 819 22 | .761 | 3,941 31 | .759 | 3,931 04 | - | 10 27 |
| Milton, | 1.733 | 7,429 49 | - | - | - | - | .584 | 2,503 36 | - | - | 1.070 | 4,587 19 | 2.803 | 12,016 68 | 272,974 76 | 2,977 41 | 764 46 | 2.097 | 3,741 87 | 3.043 | 15,758 55 | 1.733 | 8,975 61 | - | 6,782 94 |
| Nahant, | .512 | 2,194 98 | - | - | - | - | .172 | 737 28 | - | - | .315 | 1,350 33 | .827 | 3,545 31 | - | - | 225 39 | .126 | 225 39 | .728 | 3,770 70 | .512 | 2,651 77 | - | 1,118 93 |
| Needham, | .262 | 1,123 21 | - | - | .084 | 359 04 | - | - | .011 | 46 09 | - | - | .251 | 1,077 12 | - | - | 117 54 | .066 | 117 54 | .231 | 1,194 66 | .262 | 1,356 96 | 162 30 | - |
| Revere, | .741 | 3,176 72 | - | - | - | - | - | - | - | - | .207 | 887 42 | .948 | 4,064 14 | 289,492 59 | 3,157 58 | 330 87 | 1.955 | 3,488 45 | 1.376 | 7,552 59 | .741 | 3,837 81 | - | 3,714 78 |
| Saugus, | .265 | 1,136 07 | - | - | .085 | 364 41 | - | - | .010 | 42 82 | - | - | .255 | 1,093 25 | - | - | 119 34 | .067 | 119 34 | .234 | 1,212 59 | .265 | 1,372 50 | 159 91 | - |
| Stoneham, | .386 | 1,654 81 | - | - | .123 | 529 45 | - | - | .015 | 66 45 | - | - | .371 | 1,588 36 | 2,517 75 | 27 46 | 173 87 | .113 | 201 33 | .346 | 1,789 69 | .386 | 1,999 18 | 209 49 | - |
| Swampscott, | .494 | 2,117 81 | 7.523 | 159 32 | - | - | - | - | .037 | 159 32 | - | - | .457 | 1,958 49 | - | - | 219 00 | .123 | 219 00 | .420 | 2,177 49 | .494 | 2,558 55 | 381 06 | - |
| Wakefield, | .584 | 2,503 65 | 6.880 | 172 25 | .136 | 582 85 | - | - | .176 | 755 10 | - | - | .408 | 1,748 55 | - | - | 261 98 | .147 | 261 98 | .388 | 2,010 53 | .584 | 3,024 67 | 1,014 14 | - |
| Watertown, | .803 | 3,442 52 | - | - | - | - | - | - | - | - | .225 | 904 00 | 1.028 | 4,407 12 | - | - | 357 91 | .200 | 357 91 | .920 | 4,705 03 | .803 | 4,158 94 | - | 606 09 |
| Wellesley, | .642 | 2,752 30 | 3.909 | 107 59 | - | - | - | - | .025 | 107 59 | - | - | .617 | 2,644 71 | - | - | 284 01 | .159 | 284 01 | .565 | 2,928 72 | .642 | 3,325 07 | 396 35 | - |
| Weston, | .339 | 1,453 32 | - | - | - | - | .114 | 488 67 | - | - | .209 | 895 94 | .548 | 2,349 26 | - | - | 150 00 | .084 | 150 00 | .488 | 2,499 26 | .339 | 1,755 76 | - | 743 50 |
| Westwood, | .085 | 364 40 | - | - | - | - | - | - | - | - | .024 | 102 89 | .109 | 467 29 | - | - | 37 92 | .021 | 37 92 | .098 | 505 21 | .085 | 440 23 | - | 64 98 |
| Weymouth, | .556 | 2,383 61 | - | - | .178 | 763 10 | - | - | .022 | 94 32 | - | - | .534 | 2,289 29 | - | - | 251 60 | .141 | 251 60 | .491 | 2,540 89 | .556 | 2,879 65 | 338 76 | - |
| Winchester, | .622 | 2,666 56 | 10.005 | 266 79 | - | - | - | - | .062 | 266 79 | - | - | .560 | 2,399 77 | 238,706 05 | 2,603 63 | 277 02 | 1.614 | 2,880 05 | 1.019 | 5,280 42 | .622 | 3,221 48 | - | 2,058 94 |
| Winthrop, | .480 | 2,057 78 | 10.301 | 211 97 | - | - | - | - | .050 | 211 97 | - | - | .430 | 1,845 81 | - | - | 213 56 | .120 | 213 56 | .480 | 2,059 37 | .480 | 2,486 03 | 426 66 | - |
| | 100.000 | \$428,707 04 | - | - | 3.560 | \$15,260 22 | 3.560 | \$15,260 22 | - | - | - | - | 100.000 | \$428,707 04 | \$2,044,876 66 | \$22,304 03 | \$22,304 03 | 100.000 | \$178,432 26 | 100.000 | \$517,923 17 | 100.000 | \$517,923 17 | \$27,185 43 | \$27,185 43 |

Formula for allowance for contributory park construction:—
Valuation of Boston, \$1,069,723,585 00
Expended for parks, 16,700,000 00
Percentage expended, 1.56
Boston's assessment by valuation, 268,151 96
Boston's 50 per cent. assessment, 214,353 52
Difference, 53,798 44
53,798.44 : 268,151.96 :: 20.06 : 100.
20.06 ÷ 1.56 = 12.80 :— the percentage of reduction per 1 per cent. valuation.

Example: Cambridge:—
Valuation, \$92,791,663 00
Expended for parks, 1,500,000 00
Percentage, 1.617
1.617 × 12.86 = 20.795.
NOTE.—The allowance for contributory park construction is assessed on the remaining cities and towns in the proportion the percentage of the city or town bears to the total remaining percentage (column 1). The rebate of 25 per cent. is made after distributing the above allowance, and is assessed on the cities and towns specified in the proportion the percentage of the cities and towns bears to the total percentage of the cities and towns included. (See columns 5, 6, 7 and 8.)

Formula for assessing 12 1/2 per cent. for betterment:—
Local expenditure : Total expenditure :: Local assessment : Total assessment.
Example: Cambridge:—
59,488.27 : 2,044,876.66 :: 648.86 : 22,304.03.
(See columns 15 and 16.)

Formula for assessing 12 1/2 per cent. on basis of valuation:—
Local valuation : Total valuation :: Local assessment : Total assessment.
Example: Cambridge:—
7,244 : 50 :: 3,234.96 : 22,304.03.
The total valuation percentage is stated as 50, as Boston is not included in the assessment.

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SCHEDULE A.

Table showing the Amounts expended by Cities and Towns, and the Percentage on Valuation.

| CITY OR TOWN. | Amount of Valuation. | Amount expended. | Per-centage. |
|---------------------|----------------------|------------------|--------------|
| Boston, | \$1,069,723,585 00 | \$16,700,000 00 | 1.560 |
| Cambridge, | 92,791,563 00 | 1,500,000 00 | 1.617 |
| Chelsea, | 23,673,450 00 | 85,000 00 | .359 |
| Everett, | 15,065,406 00 | 50,000 00 | .332 |
| Lynn, | 52,637,073 00 | 78,000 00 | .148 |
| Malden, | 29,849,388 00 | 110,000 00 | .369 |
| Medford, | 19,391,980 00 | 75,000 00 | .387 |
| Melrose, | 12,693,425 00 | 100,000 00 | .788 |
| Newton, | 59,103,233 00 | 62,000 00 | .105 |
| Somerville, | 51,475,670 00 | 500,000 00 | .971 |
| Waltham, | 19,627,274 00 | 80,000 00 | .408 |
| Brookline, | 74,251,728 00 | 500,000 00 | .673 |
| Swampscott, | 6,327,670 00 | 37,000 00 | .585 |
| Wakefield, | 7,479,667 00 | 40,000 00 | .535 |
| Wellesley, | 8,225,469 00 | 25,000 00 | .304 |
| Winchester, | 7,968,162 00 | 62,000 00 | .778 |
| Winthrop, | 6,142,687 00 | 50,000 00 | .801 |

(The unit of percentage is 12.86.)

Deductions from Assessment.

| | | | |
|--------------------|--------|---------------------|--------|
| Boston, | 20.060 | Somerville, | 12.487 |
| Cambridge, | 20.795 | Waltham, | 5.247 |
| Chelsea, | 4.617 | Brookline, | 8.655 |
| Everett, | 4.270 | Swampscott, | 7.523 |
| Lynn, | 1.903 | Wakefield, | 6.880 |
| Malden, | 4.745 | Wellesley, | 3.909 |
| Medford, | 4.968 | Winchester, | 10.005 |
| Melrose, | 10.134 | Winthrop, | 10.301 |
| Newton, | 1.350 | | |

Payments to the Commonwealth by Cities and Towns of the Metropolitan Parks District, in Accordance with Award of Apportionment Commission.

| | 1900. | | | | 1901. | | | | 1902. | | | |
|------------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|
| | Sinking Fund. | Interest. | Maintenance. | Total. | Sinking Fund. | Interest. | Maintenance. | Total. | Sinking Fund. | Interest. | Maintenance. | Total. |
| Boston, . . . | \$62,086 59 | \$138,125 00 | \$58,750 00 | \$258,961 59 | \$63,781 46 | \$138,579 63 | \$83,087 50 | \$285,448 59 | \$68,947 25 | \$147,012 50 | \$93,749 75 | \$309,709 50 |
| Cambridge, . . | 6,819 20 | 15,171 19 | 6,454 19 | 28,444 58 | 7,005 59 | 15,221 18 | 9,121 47 | 31,348 24 | 7,572 21 | 16,147 10 | 10,294 10 | 34,013 41 |
| Chelsea, . . . | 1,805 56 | 4,016 96 | 1,708 91 | 7,531 43 | 1,854 91 | 4,030 20 | 2,415 13 | 8,300 24 | 2,004 94 | 4,275 35 | 2,725 62 | 9,005 91 |
| Everett, . . . | 1,500 49 | 3,338 26 | 1,420 18 | 6,258 93 | 1,541 50 | 3,349 27 | 2,007 09 | 6,897 86 | 1,666 17 | 3,553 00 | 2,265 11 | 7,484 28 |
| Lynn, | 3,545 38 | 7,887 70 | 3,355 62 | 14,788 70 | 3,642 29 | 7,913 70 | 4,742 37 | 16,298 36 | 3,936 89 | 8,395 08 | 5,352 04 | 17,684 01 |
| Malden, . . . | 3,076 60 | 6,844 74 | 2,911 93 | 12,833 27 | 3,190 70 | 6,867 30 | 4,115 28 | 14,143 28 | 3,416 34 | 7,285 04 | 4,644 34 | 15,345 72 |
| Medford, . . . | 3,029 48 | 6,739 91 | 2,867 33 | 12,636 70 | 3,112 27 | 6,762 12 | 4,052 25 | 13,928 64 | 3,363 99 | 7,173 46 | 4,573 21 | 15,110 66 |
| Melrose, . . . | 1,020 58 | 2,270 58 | 965 96 | 4,257 12 | 1,048 48 | 2,278 06 | 1,365 15 | 4,691 69 | 1,133 28 | 2,416 63 | 1,540 65 | 5,090 56 |
| Newton, . . . | 6,391 40 | 14,219 45 | 6,049 28 | 26,660 13 | 6,566 10 | 14,266 32 | 8,549 26 | 29,381 68 | 7,097 18 | 15,134 14 | 9,648 34 | 31,879 66 |
| Quincy, | 1,628 26 | 3,622 52 | 1,541 11 | 6,791 89 | 1,672 77 | 3,634 46 | 2,178 01 | 7,485 24 | 1,808 07 | 3,855 55 | 2,458 00 | 8,121 62 |
| Somerville, . . | 4,305 59 | 9,578 99 | 4,075 12 | 17,959 70 | 4,423 28 | 9,610 56 | 5,759 25 | 19,793 09 | 4,781 04 | 10,195 17 | 6,499 65 | 21,475 86 |
| Waltham, . . . | 1,654 26 | 3,680 37 | 1,565 72 | 6,900 35 | 1,699 48 | 3,692 50 | 2,212 77 | 7,604 75 | 1,836 94 | 3,917 11 | 2,497 24 | 8,251 29 |
| Woburn, | 902 78 | 2,008 48 | 854 45 | 3,765 71 | 927 46 | 2,015 09 | 1,207 58 | 4,150 13 | 1,002 48 | 2,137 68 | 1,362 82 | 4,502 98 |
| Arlington, . . . | 996 98 | 2,218 07 | 943 62 | 4,158 67 | 1,024 24 | 2,225 38 | 1,333 56 | 4,583 18 | 1,107 08 | 2,360 74 | 1,505 01 | 4,972 83 |
| Belmont, . . . | 534 48 | 1,189 09 | 505 87 | 2,229 44 | 549 09 | 1,193 01 | 714 92 | 2,457 02 | 593 50 | 1,265 57 | 806 83 | 2,665 90 |
| Braintree, . . . | 422 90 | 940 87 | 400 27 | 1,764 04 | 434 46 | 943 97 | 565 70 | 1,944 13 | 469 60 | 1,001 40 | 638 42 | 2,109 42 |
| Brookline, . . | 7,476 40 | 16,633 32 | 7,076 22 | 31,185 94 | 7,680 77 | 16,688 14 | 10,000 54 | 34,369 45 | 8,301 99 | 17,703 27 | 11,286 19 | 37,291 45 |
| Canton, | 517 12 | 1,150 46 | 489 44 | 2,157 02 | 531 25 | 1,154 25 | 691 70 | 2,377 20 | 574 22 | 1,224 47 | 780 62 | 2,579 31 |
| Cohasset, . . . | 82 65 | 180 00 | 65 00 | 327 65 | 82 65 | 180 00 | 150 00 | 412 65 | 96 43 | 194 00 | 150 00 | 440 43 |
| Dedham, . . . | 966 06 | 2,149 27 | 914 33 | 4,029 66 | 992 47 | 2,156 35 | 1,292 24 | 4,441 06 | 1,072 74 | 2,287 53 | 1,488 36 | 4,818 63 |
| Dorset, | 122 81 | 273 22 | 116 22 | 512 25 | 126 17 | 274 12 | 164 30 | 564 59 | 136 37 | 290 80 | 185 40 | 612 57 |

| | | | | | | | | | | | | |
|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Ilhingham, . . . | 405 51 | 902 16 | 383 79 | 1,661 46 | 410 59 | 905 13 | 542 42 | 1,864 14 | 450 28 | 960 19 | 612 14 | 2,022 61 |
| Hull, . . . | 518 39 | 1,153 30 | 490 64 | 2,162 33 | 532 56 | 1,157 11 | 693 43 | 2,383 10 | 575 04 | 1,227 50 | 782 56 | 2,885 70 |
| Hyde Park, . . . | 943 70 | 2,099 52 | 893 18 | 3,936 40 | 969 49 | 2,106 44 | 1,262 31 | 4,338 24 | 1,047 90 | 2,234 58 | 1,424 59 | 4,707 07 |
| Milton, . . . | 3,775 66 | 8,395 84 | 3,571 56 | 15,740 46 | 3,876 71 | 8,423 00 | 5,047 58 | 17,347 29 | 4,190 26 | 8,935 38 | 5,696 48 | 18,822 12 |
| Nahant, . . . | 902 78 | 2,008 48 | 854 45 | 3,765 71 | 927 46 | 2,015 10 | 1,207 58 | 4,150 14 | 1,002 48 | 2,137 68 | 1,362 82 | 4,502 98 |
| Needham, . . . | 280 41 | 637 22 | 271 08 | 1,194 71 | 294 24 | 639 32 | 383 09 | 1,316 05 | 318 03 | 678 20 | 432 35 | 1,428 58 |
| Revere, . . . | 1,706 35 | 3,796 25 | 1,615 01 | 7,117 61 | 1,752 99 | 3,808 77 | 2,282 43 | 7,844 19 | 1,894 78 | 4,040 45 | 2,575 86 | 8,511 09 |
| Saugus, . . . | 290 18 | 645 58 | 274 65 | 1,210 41 | 298 11 | 647 71 | 388 15 | 1,333 97 | 322 22 | 687 11 | 438 05 | 1,447 88 |
| Stoneham, . . . | 429 02 | 954 50 | 406 07 | 1,789 59 | 440 75 | 957 04 | 573 86 | 1,972 25 | 476 39 | 1,015 90 | 647 64 | 2,139 93 |
| Swampscott, . . . | 520 88 | 1,158 83 | 492 99 | 2,172 70 | 535 12 | 1,162 65 | 696 75 | 2,394 52 | 578 41 | 1,233 37 | 786 31 | 2,568 09 |
| Wakelield, . . . | 481 15 | 1,070 45 | 455 40 | 2,007 00 | 494 31 | 1,073 97 | 643 61 | 2,211 89 | 534 29 | 1,139 31 | 726 34 | 2,389 94 |
| Watertown, . . . | 1,140 87 | 2,538 19 | 1,079 80 | 4,758 86 | 1,172 65 | 2,546 56 | 1,526 05 | 5,244 06 | 1,206 85 | 2,701 46 | 1,722 23 | 5,680 54 |
| Wellesley, . . . | 700 69 | 1,558 80 | 663 16 | 2,922 71 | 719 84 | 1,564 00 | 937 27 | 3,221 11 | 778 06 | 1,659 14 | 1,057 75 | 3,494 95 |
| Weston, . . . | 598 92 | 1,332 46 | 566 80 | 2,498 24 | 615 29 | 1,336 85 | 801 10 | 2,753 24 | 665 05 | 1,418 16 | 904 11 | 2,987 32 |
| Westwood, . . . | 121 49 | 270 29 | 114 99 | 506 77 | 124 81 | 271 17 | 162 48 | 558 46 | 134 90 | 287 68 | 183 38 | 605 96 |
| Weymouth, . . . | 608 84 | 1,354 53 | 570 24 | 2,539 61 | 625 48 | 1,359 00 | 814 36 | 2,798 84 | 676 07 | 1,441 66 | 919 07 | 3,036 80 |
| Winchester, . . . | 1,263 08 | 2,811 41 | 1,196 02 | 5,271 11 | 1,298 22 | 2,820 67 | 1,690 34 | 5,809 23 | 1,403 22 | 2,992 20 | 1,907 64 | 6,303 12 |
| Winthrop, . . . | 595 20 | 1,324 18 | 563 34 | 2,482 72 | 611 47 | 1,328 55 | 796 12 | 2,730 14 | 660 92 | 1,409 38 | 898 48 | 2,968 78 |
| Totals, . . . | \$124,173 17 | \$276,250 00 | \$117,500 00 | \$617,923 17 | \$127,562 88 | \$271,159 25 | \$166,175 00 | \$570,887 13 | \$137,894 46 | \$294,025 06 | \$187,499 50 | \$619,418 96 |

KEY TO LETTERS AND FIGURES ON THE MAP.

METROPOLITAN HOLDINGS.

| | |
|---------------------------------|---------------------------------|
| A. King's Beach and Lynn Shore. | N. Neponset River Parkway. |
| B. Revere Beach. | O. Blue Hills Parkway. |
| C. Revere Beach Parkway. | P. Blue Hills Reservation. |
| D. Fellsway. | Q. Nantasket Beach Reservation. |
| E. Fellsway East. | R. Quincy Shore Reservation. |
| F. Fellsway West. | S. Fowl Meadows. |
| G. Middlesex Fells Reservation. | T. Neponset River Reservation. |
| H. Mystic Valley Parkway. | U. Mystic River Reservation. |
| J. Beaver Brook Reservation. | V. Fresh Pond Parkway. |
| K. Charles River Reservation. | W. Whitmore Brook Entrance. |
| L. Hemlock Gorge Reservation. | X. Furnace Brook Parkway. |
| M. Stony Brook Reservation. | |

OPEN SPACES.

CONTROLLED BY—

| | |
|---|---------------------------------------|
| 1. Boston Common | Boston Department of Public Grounds. |
| 2. Public Garden | Boston Department of Public Grounds. |
| 3. Commonwealth Avenue | Boston Park Commission. |
| 4. Charlesbank | Boston Park Commission. |
| 5. Back Bay Fens | Boston Park Commission. |
| 6. Blackstone Square | Boston Department of Public Grounds. |
| 7. Franklin Square | Boston Department of Public Grounds. |
| 8. Monument Square | Bunker Hill Monument Association. |
| 9. Charlestown Heights | Boston Park Commission. |
| 10. Charlestown Playground | Boston Park Commission. |
| 11. Wood Island Park | Boston Park Commission. |
| 12. Commonwealth Park | Boston Department of Public Grounds. |
| 13. Telegraph Hill | Boston Department of Public Grounds. |
| 14. Independence Square | Boston Department of Public Grounds. |
| 15. Marine Park | Boston Park Commission. |
| 16. Castle Island | Boston Park Commission. |
| 17. Rogers Park | Boston Department of Public Grounds. |
| 18. Chestnut Hill Reservoir | Metropolitan Water Board. |
| 19. Longwood Playground | Brookline Park Commission. |
| 20. Brookline Avenue Playground | Brookline Park Commission. |
| 21. Cypress Street Playground | Brookline Park Commission. |
| 22. Muddy River Parkway | Boston and Brookline Park Commission. |
| 23. Old Brookline Reservoir | Boston Water Board. |
| 24. Brookline Reservoir | Brookline Water Department. |
| 25. Fisher Hill Reservoir | Boston Water Board. |
| 26. Madison Square | Boston Department of Public Grounds. |
| 27. Orchard Park | Boston Department of Public Grounds. |
| 28. Parker Hill Reservoir | Boston Water Board. |
| 29. Highland Park | Boston Department of Public Grounds. |
| 30. Washington Park | Boston Department of Public Grounds. |

OPEN SPACES.

CONTROLLED BY—

| | |
|---|--|
| 31. Fountain Square | Boston Department of Public Grounds. |
| 32. Jamaica Pond | Boston Park Commission. |
| 33. Arnold Arboretum | Boston Park Commission. |
| 34. Franklin Park | Boston Park Commission. |
| 35. Franklin Field | Boston Park Commission. |
| 36. Dorchester Park | Boston Park Commission. |
| 37. Squaw Rock | Boston Sewage Department. |
| 38. Moon Island | Boston Sewage Department. |
| 39. Merrymount Park | Quincy Park Commission. |
| 40. Faxon Park | Quincy Park Commission. |
| 41. Quincy Water Reserve | Quincy Water Commission. |
| 42. French's Common | Braintree Selectmen. |
| 43. Webb Park | Weymouth Park Commission. |
| 44. Beals Park | Weymouth Park Commission. |
| 45. Hull Common | Hull Park Commission. |
| 46. Dedham Common | Dedham Selectmen. |
| 47. Boston Parental School | Trustees. |
| 48. Brookline Water Works | Brookline Water Department. |
| 49. Brookline Water Reserve | Brookline Water Department. |
| 50. Brookline Water Reserve | Brookline Water Department. |
| 51. Newton Water Reserve | Newton Water Board. |
| 52. Needham Common | Needham Selectmen. |
| 53. Waban Hill Reservoir | Newton Water Board. |
| 54. Farlow Park | Newton Street Commission. |
| 55. Newton Centre Playground and Green | Newton Street Commission. |
| 56. River Park, Weston | Weston Park Commission. |
| 57. Auburndale Park | Newton Street Commission. |
| 58. River Park, Auburndale | Newton Street Commission. |
| 59. Stony Brook Storage Basin | Cambridge Water Board. |
| 60. Waltham Water Works | Waltham Water Board. |
| 61. Waltham Common | Waltham Department of Public Grounds. |
| 62. Saltonstall Park | Watertown Park Commission. |
| 63. United States Arsenal | National Government. |
| 64. Fresh Pond Park | Cambridge Water Board. |
| 65. Cambridge Common | Cambridge Park Commission. |
| 66. Broadway Park | Cambridge Park Commission. |
| 67. The Esplanade | Cambridge Park Commission. |
| 68. Central Hill Park | Somerville Department of Public Grounds. |
| 69. Broadway Park | Somerville Department of Public Grounds. |
| 70. Nathan Tufts Park | Somerville Department of Public Grounds. |
| 71. Mystic Reservoir | Boston Water Board. |
| 72. Mystic Water Works | Boston Water Board. |
| 73. Arlington Heights | Arlington Water Commission. |
| 74. Arlington Water Reserve | Arlington Water Commission. |
| 75. Lexington Common | Lexington Selectmen. |
| 76. Boston Water Reserve | Boston Water Board. |
| 77. Winchester Common | Winchester Selectmen. |
| 78. Woburn Park | Woburn Park Commission. |
| 79. Cotymore Lea | Malden Park Commission. |
| 80. Sheridan Park | Malden Park Commission. |
| 81. Fellsmere | Malden Park Commission. |
| 82. Craddock Field | Malden Park Commission. |
| 83. Ferryway Green | Malden Park Commission. |
| 84. Playground | Stoneham Selectmen. |
| 85. Wakefield Common | Wakefield Selectmen. |
| 86. Lake Park | Wakefield Selectmen. |
| 87. Sewall's Wood | Melrose Park Commission. |
| 88. Eastern Common | Melrose Park Commission. |
| 89. Waitt's Mount | Malden Park Commission. |
| 90. Malden Water Works | Malden Water Board. |
| 91. Union Park | Chelsea Park Commission. |
| 92. United States Marine and Naval Hospital | National Government. |

| OPEN SPACES. | CONTROLLED BY — |
|--------------------------------------|---|
| 93. United States Battery | National Government. |
| 94. United States Battery | National Government. |
| 95. Lynn Common | Lynn Park Commission. |
| 96. Lynn Woods | Lynn Park Commission. |
| 97. Lynn Water Reserve | Lynn Water Board. |
| 98. Meadow Park | Lynn Park Commission. |
| 99. Oceanside Terrace | Lynn Park Commission. |
| 100. Nahant Long Beach | Transferred to Metropolitan Park Commission. |
| 101. Nahant Short Beach | |
| 102. Devereux Beach | Marblehead Selectmen. |
| 103. Marblehead Park | Marblehead Park Commission. |
| 104. Crocker Rock | Marblehead Park Commission. |
| 105. Fort Sewall | Marblehead Selectmen. |
| 106. Fort Glover | Marblehead Selectmen. |
| 107. Prospect Hill | Waltham Department of Public Grounds. |
| 108. Rindge Field | Cambridge Park Commission. |
| 109. Winthrop Square | Cambridge Park Commission. |
| 110. Cambridge Field | Cambridge Park Commission. |
| 111. The Front | Cambridge Park Commission. |
| 112. Charles River Parkway | Cambridge Park Commission. |
| 113. Hastings Square | Cambridge Park Commission. |
| 114. North Brighton Playground . . | Boston Park Commission. |
| 115. Billings Field | Boston Park Commission. |
| 116. Milton Playground | Milton Selectmen. |
| 117. Milton Hill | Trustees Public Reservations. |
| 118. Neponset Playground | Boston Park Commission. |
| 119. Christopher Gibson Playground . | Boston Park Commission. |
| 120. M Street Playground | Boston Park Commission. |
| 121. Mystic Playground | Boston Park Commission. |
| 122. North End Park | Boston Park Commission. |
| 123. West Roxbury Parkway | Boston Park Commission. |
| 124. Watertown Water Works | Watertown Water Board. |
| 125. Bullough Pond Park | Newton Street Commission. |
| 126. Crystal Lake | Newton Street Commission. |
| 127. Islington Park | Newton Street Commission. |
| 128. Wolcott Park | Newton Street Commission. |
| 129. Lincoln Park | Newton Street Commission. |
| 130. Linwood Avenue Park | Newton Street Commission. |
| 131. Elmwood Park | Newton Street Commission. |
| 132. Washington Park | Newton Street Commission. |
| 133. Cabot Park | Newton Street Commission. |
| 134. Boyd's Pond Park | Newton Street Commission. |
| 135. Walnut Park | Newton Street Commission. |
| 136. Kenrick Park | Newton Street Commission. |
| 137. Loring Park | Newton Street Commission. |
| 138. Lower Falls Park | Newton Street Commission. |
| 139. Hobbs Brook Storage Basin . . . | Cambridge Water Board. |
| 140. Adams Park | Weymouth Park Commission. |
| 141. Ward 4 Playground | Quincy Park Commission. |
| 142. Heath Street Lot | Brookline Park Commission. |
| 143. Dudley Street Triangle | Brookline Park Commission. |
| 144. Newton Street Reserve | Brookline Water Department, Street Department, and Overseers of Poor. |
| 145. Payson Park Reservoir | Cambridge Water Board. |
| 146. Dana Square | Cambridge Park Commission. |
| 147. Fort Washington | Cambridge Park Commission. |
| 148. Clifton Grove | Malden Park Commission. |
| 149. Menotomy Rock Park | Arlington Park Commission. |
| 150. Russell Park | Arlington Park Commission. |
| 151. Meadow Park | Arlington Park Commission. |
| 152. Great Meadows | Arlington Water Commission. |
| 153. Belmont | Belmont Selectmen. |
| 154. How Park | Watertown Park Commission. |

OPEN SPACES.

CONTROLLED BY—

| | |
|--|---|
| 155. Whitney Hill Park | Watertown Park Commission. |
| 156. Highway Lot | Watertown Highway Department. |
| 157. Irving Park | Watertown Park Commission. |
| 158. Knowles Delta | Watertown Park Commission. |
| 159. Wellesley Water Works | Wellesley Water Board. |
| 160. Maugus Hill Reservoir | Wellesley Water Board. |
| 161. Stone Park Playground | Dedham Park Commission. |
| 162. Hamilton Park | Hyde Park Commission. |
| 163. Little Pond Reservation | Braintree Water Board. |
| 164. Stand Pipe | Braintree Water Board. |
| 165. City Park | Everett Park Commission. |
| 166. Brooks Park | Medford Park Commission. |
| 167. Magoun Park | Medford Park Commission. |
| 168. Logan Park | Medford Park Commission. |
| 169. Public Common | Medford Park Commission. |
| 170. Governor Avenue | Medford Park Commission. |
| 171. Hastings Park | Medford Park Commission. |
| 172. Brooks Playstead | Medford Park Commission. |
| 173. Prospect Hill Park | Somerville Department of Public Grounds. |
| 174. Lincoln Park | Somerville Department of Public Grounds. |
| 175. Playground and High-service Pump- ing Station. | Somerville Department of Public Grounds and Water Board. |
| 176. Everett Avenue Park and Playground | Chelsea Park Commission. |
| 177. Washington Park | Chelsea Park Commission. |
| 178. Powder Horn Park | Chelsea Park Commission, Water Board and Soldiers' Home. |
| 179. Willow Street Park | Chelsea Park Commission. |
| 180. Leased Common | Nahant Selectmen. |
| 181. Dover Common | Dover Park Commission. |
| 182. Water Reservation | Needham Water Commission. |
| 183. Ryan's Hill Standpipe | Needham Water Commission. |
| 184. Highlandville Common | Needham Selectmen. |
| 185. Dedham Avenue Triangle | Needham Selectmen. |
| 186. Ward 3 Playground | Quincy Park Commission. |
| 187. Ward 6 Playground | Quincy Park Commission. |
| 188. Sewerage Land | Quincy Sewerage Commission. |
| 189. Reservoir | Metropolitan Water Board. |
| 190. Quincy Standpipe | Quincy Water Commission. |
| 191. Pumping Station | Quincy Water Commission. |
| 192. Ward 2 Playground | Quincy Park Commission. |
| 193. Blaney's Beach | Swampscott Park Commission. |
| 194. Lyman's Hill Standpipe | Brookline Water Department. |

COMMONWEALTH OF MASSACHUSETTS
MAP OF THE
METROPOLITAN DISTRICT
OF
BOSTON

Showing local public reservations and holdings of the
METROPOLITAN PARK COMMISSION
December 1, 1902.

Legend—
Local parks and reservations
Metropolitan reservations and parkways

